SCD-XE800

SERVICE MANUAL

AEP Model
UK Model

Ver. 1.0 2010.06

Model Name Using Similar Mechanism	SCD-XA5400ES
Mechanism Type	CDM66F1-DVBU101
Optical Pick-up Block Name	KHM-313CAB

SPECIFICATIONS

When a Super Audio CD is played

Playing frequency range	2 Hz to 100 kHz
Frequency response	2 Hz to 40 kHz (–3 dB)
Dynamic range	100 dB or more
Total harmonic distortion rate	0.0035 % or less
Wow and flutter	Value of measurable limit (±0.001 % W. PEAK) or less

When a CD is played

Frequency response	2 Hz to 20 kHz (±0.5 dB)
Dynamic range	96 dB or more
Total harmonic distortion rate	0.0039 % or less
Wow and flutter	Value of measurable limit (±0.001 % W. PEAK) or less

Output jacks

	Jack type	Output level	Load impedance
ANALOG OUT L/R	Phono jacks	2 Vrms (at 50 kilohms)	Over 10 kilohms
DIGITAL (CD) OUT OPTICAL*	Square optical output connector	–18 dBm	(Light emitting wave length: 660 nm)
DIGITAL (CD) OUT COAXIAL*	Coaxial output connector	0.5 Vp-p	75 ohms

* Outputs only the audio signals of the CD

General

Laser Diode Properties	Emission duration: Continuous Laser Output*: Less than 44.6 µW * This output is the value measurement at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Power requirements	230 V AC, 50/60 Hz
Power consumption	20 W
Power consumption (during standby mode)	0.5 W
Dimensions (w/h/d)	430 × 95 × 295 mm incl. projecting parts
Mass (approx.)	3.5 kg

Supplied accessories

Audio connecting cord	Red and White plugs (1)
Remote commander	RM-ASU097 (1)
Batteries	R03 (size-AAA) (2)

Design and specifications are subject to change without notice.

- Standby power consumption 0.5 W.
- Halogenated flame retardants are not used in the printed wiring boards.

SUPER AUDIO CD PLAYER

SONY

9-889-883-01
2010F05-1

Sony Corporation
Audio&Video Business Group

www.electronicsrepair.net

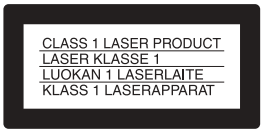
NOTES ON CHIP COMPONENT REPLACEMENT

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

FLEXIBLE CIRCUIT BOARD REPAIRING

- Keep the temperature of soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



This appliance is classified as a CLASS 1 LASER product. This marking is located on the rear exterior.

SAFETY-RELATED COMPONENT WARNING!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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Accessories are given in the last of the electrical parts list.

SECTION 1
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pickup block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(**Caution:** Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

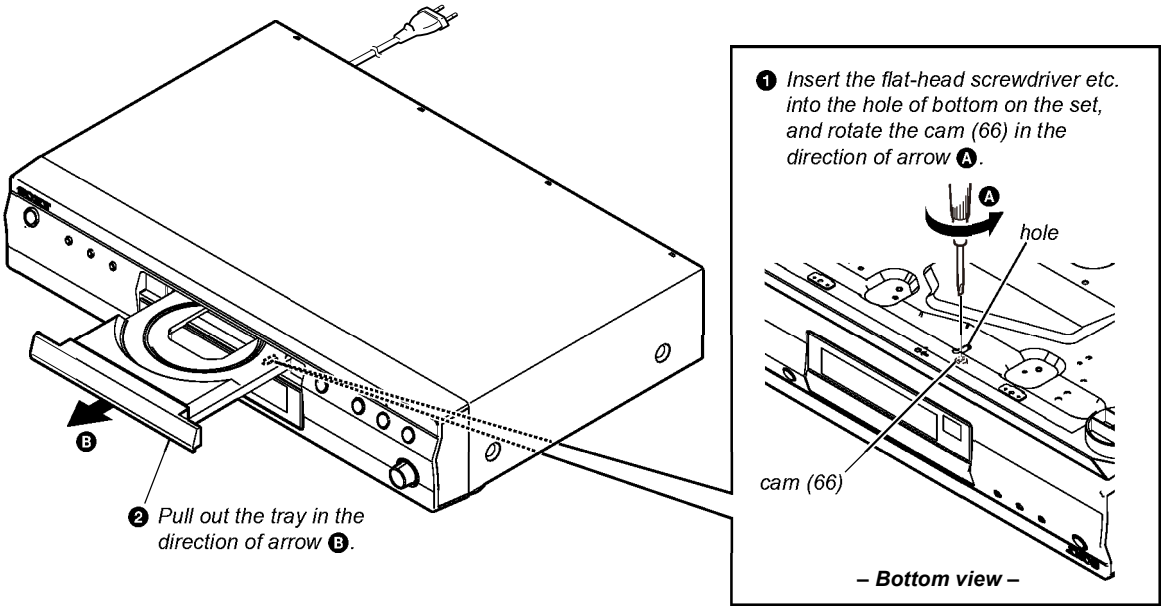
- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 °C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

ABOUT THE REMOTE COMMANDER USED IN THE SERVICE MODE

When the service mode is operated, the following, remote commander is necessary.
(The service mode cannot be operated by remote commander to which this machine is attached)
Remote commander (RM-ASP004): Part No. 1-479-272-21

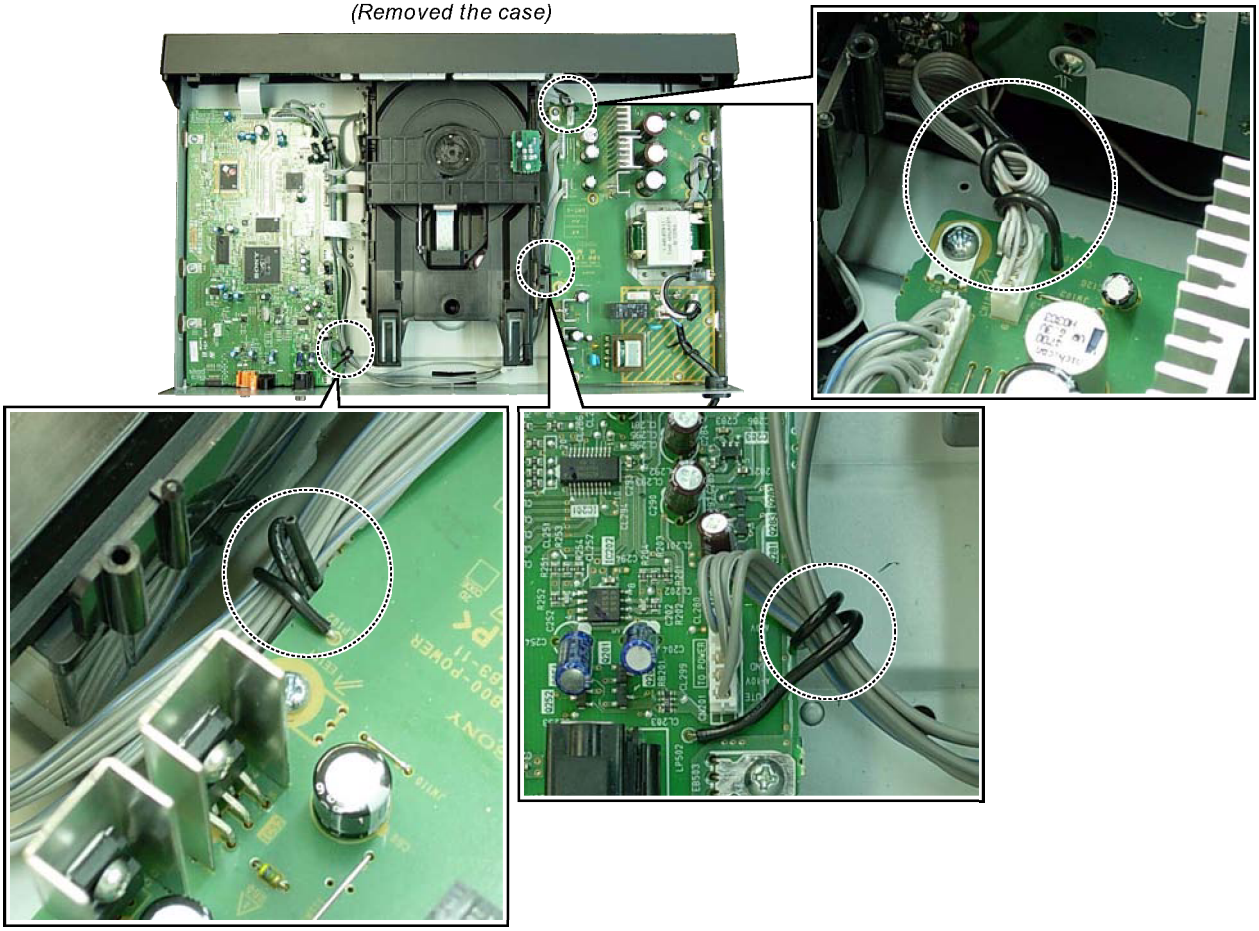
Note: Above-mentioned remote commander is one example. If it is the one printed under a remote commander as “DVD”, any remote commander can be operated.

HOW TO OPEN THE TRAY WHEN POWER SWITCH TURN OFF


❷ Pull out the tray in the direction of arrow B.
❶ Insert the flat-head screwdriver etc. into the hole of bottom on the set, and rotate the cam (66) in the direction of arrow A.
A
hole
cam (66)
– Bottom view –

PROCESSING OF WIRES

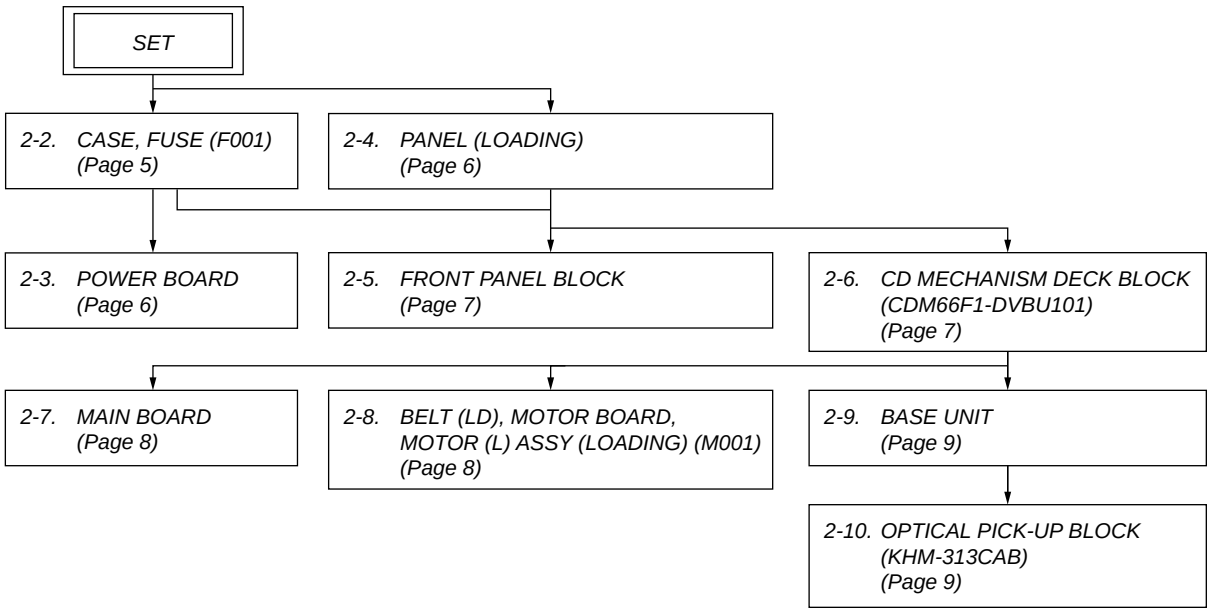
– Top view –
(Removed the case)



SECTION 2
DISASSEMBLY

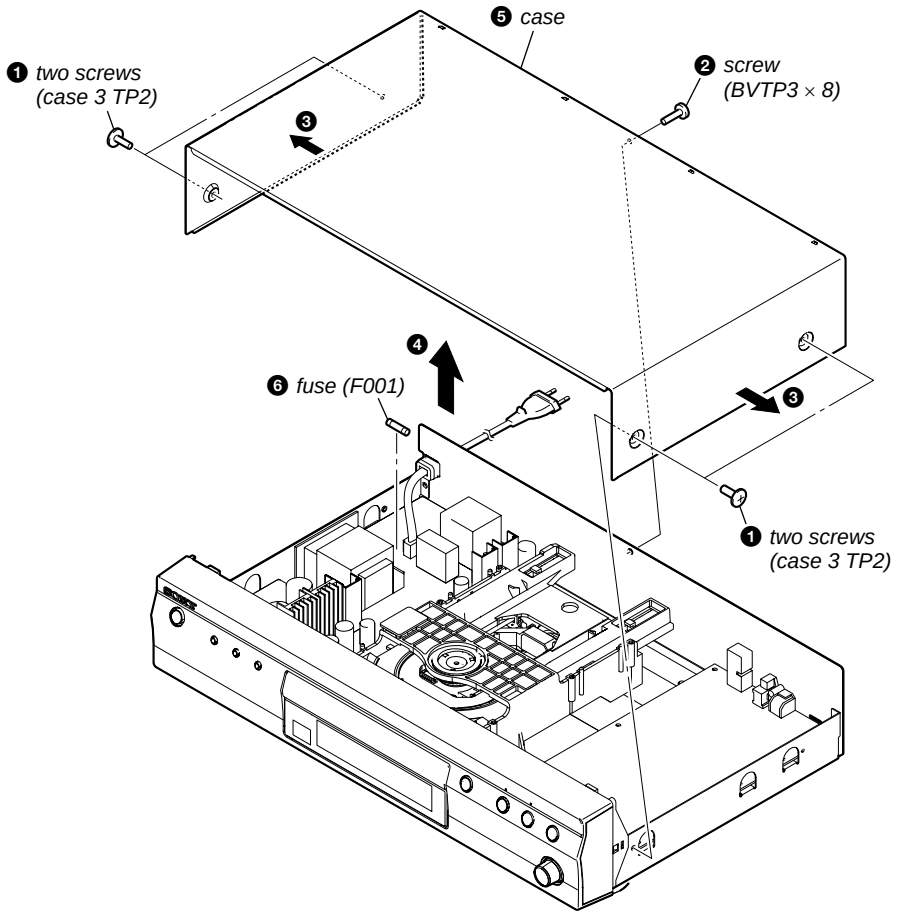
- This set can be disassembled in the order shown below.

2-1. DISASSEMBLY FLOW

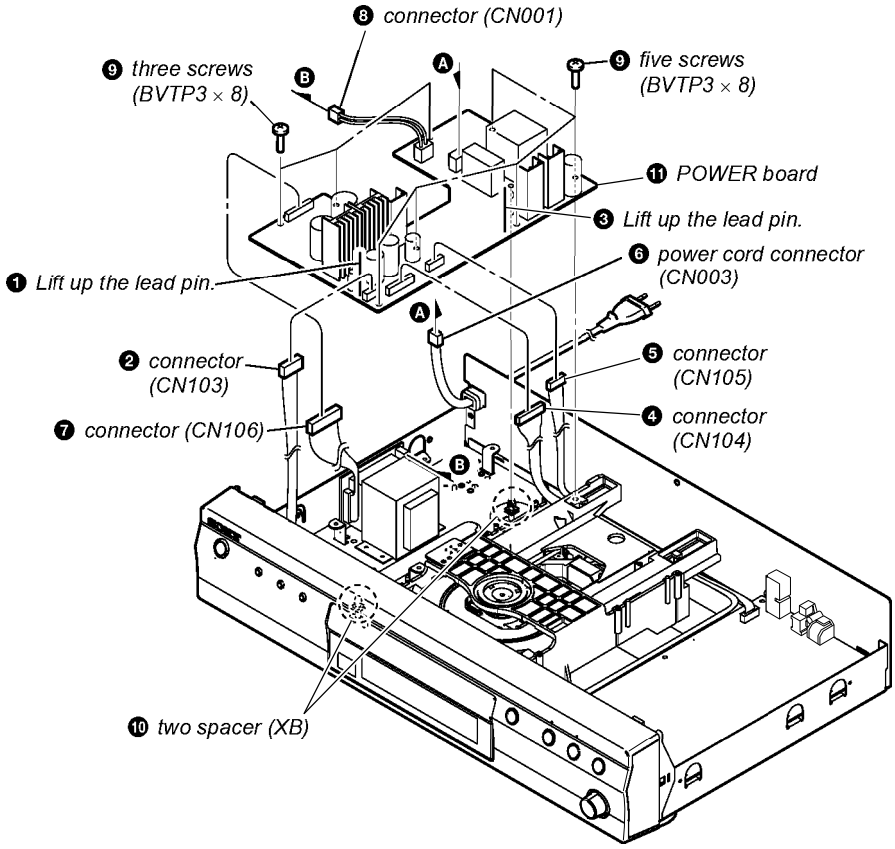

SET
2-2. CASE, FUSE (F001) (Page 5)
2-4. PANEL (LOADING) (Page 6)
2-3. POWER BOARD (Page 6)
2-5. FRONT PANEL BLOCK (Page 7)
2-6. CD MECHANISM DECK BLOCK (CDM66F1-DVBU101) (Page 7)
2-7. MAIN BOARD (Page 8)
2-8. BELT (LD), MOTOR BOARD, MOTOR (L) ASSY (LOADING) (M001) (Page 8)
2-9. BASE UNIT (Page 9)
2-10. OPTICAL PICK-UP BLOCK (KHM-313CAB) (Page 9)

Note: Follow the disassembly procedure in the numerical order given.

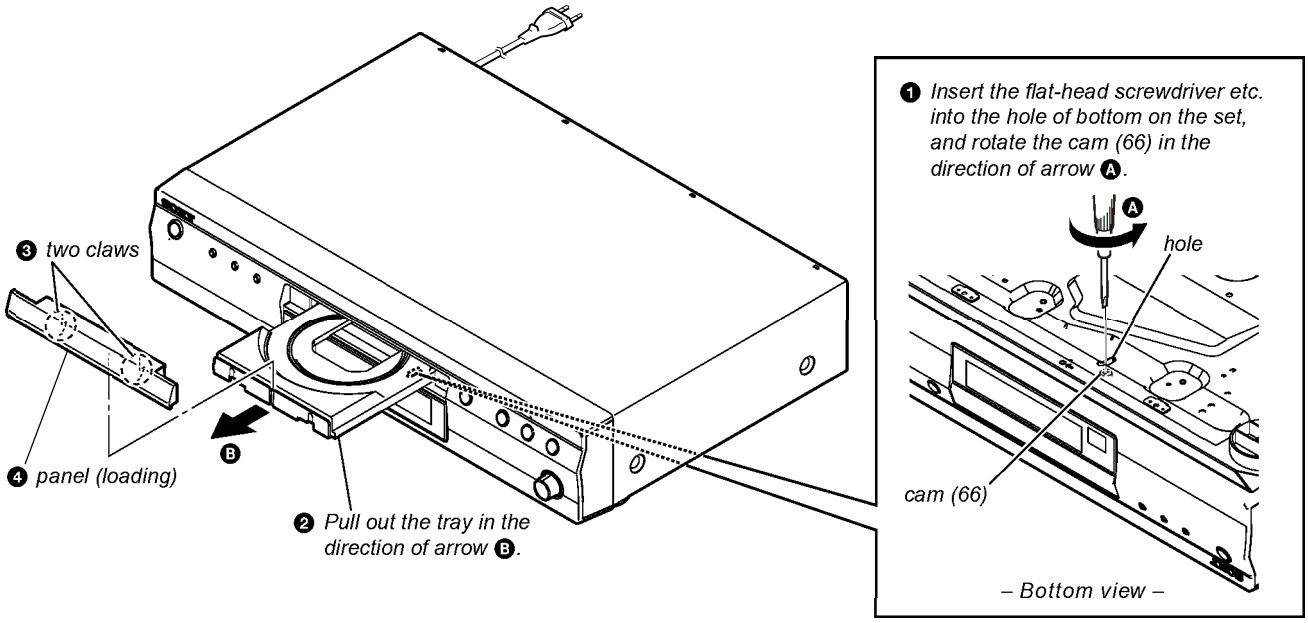
2-2. CASE, FUSE (F001)



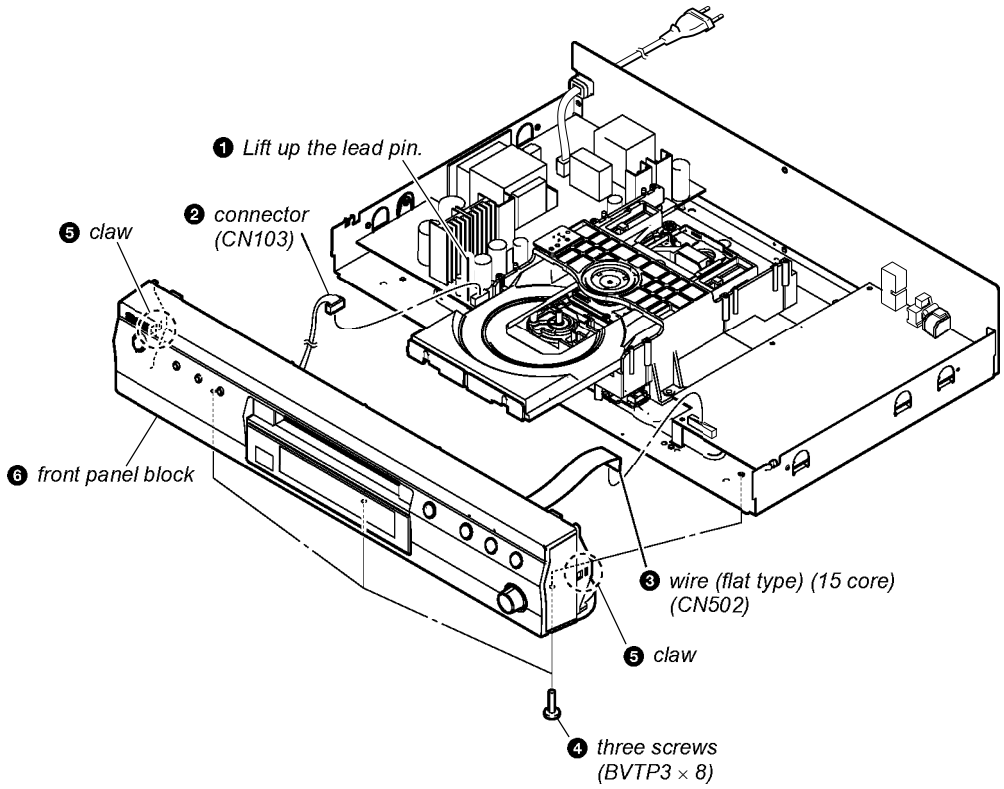
2-3. POWER BOARD


8 connector (CN001)
9 three screws (BVTP3 × 8)
9 five screws (BVTP3 × 8)
11 POWER board
3 Lift up the lead pin.
6 power cord connector (CN003)
1 Lift up the lead pin.
2 connector (CN103)
5 connector (CN105)
7 connector (CN106)
4 connector (CN104)
10 two spacer (XB)

2-4. PANEL (LOADING)

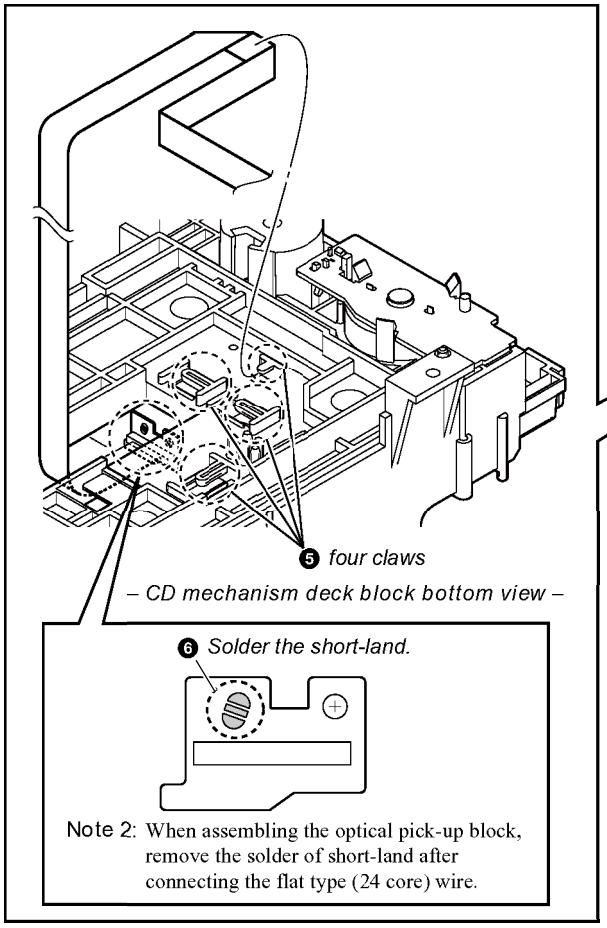

3 two claws
4 panel (loading)
2 Pull out the tray in the direction of arrow B.
1 Insert the flat-head screwdriver etc. into the hole of bottom on the set, and rotate the cam (66) in the direction of arrow A.
hole
cam (66)
– Bottom view –

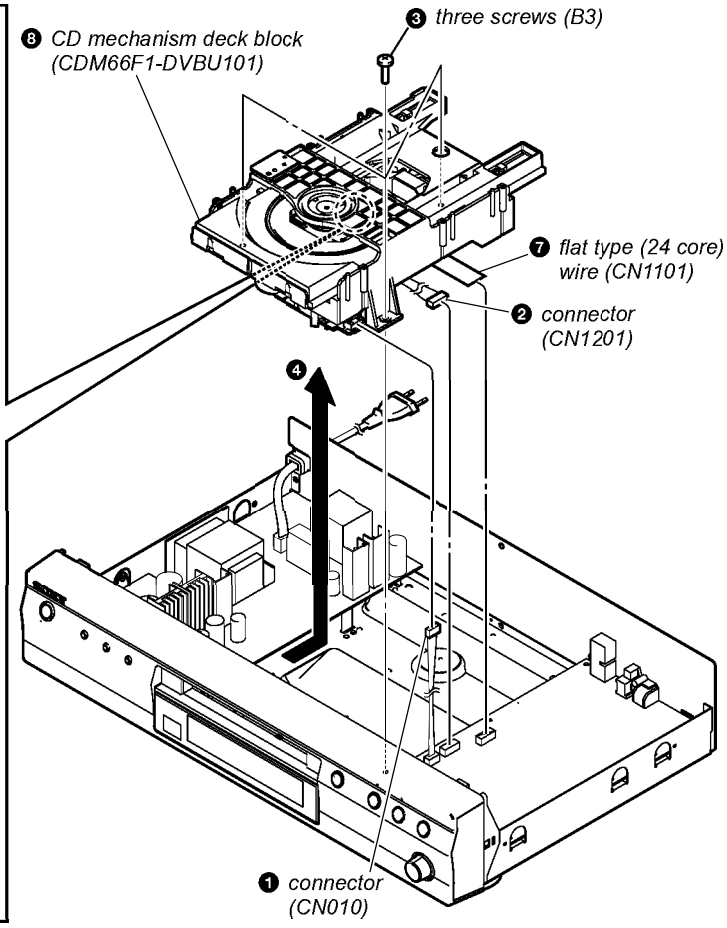
2-5. FRONT PANEL BLOCK


❶ Lift up the lead pin.
❷ connector (CN103)
❺ claw
❻ front panel block
❸ wire (flat type) (15 core) (CN502)
❺ claw
❹ three screws (BVTP3 × 8)

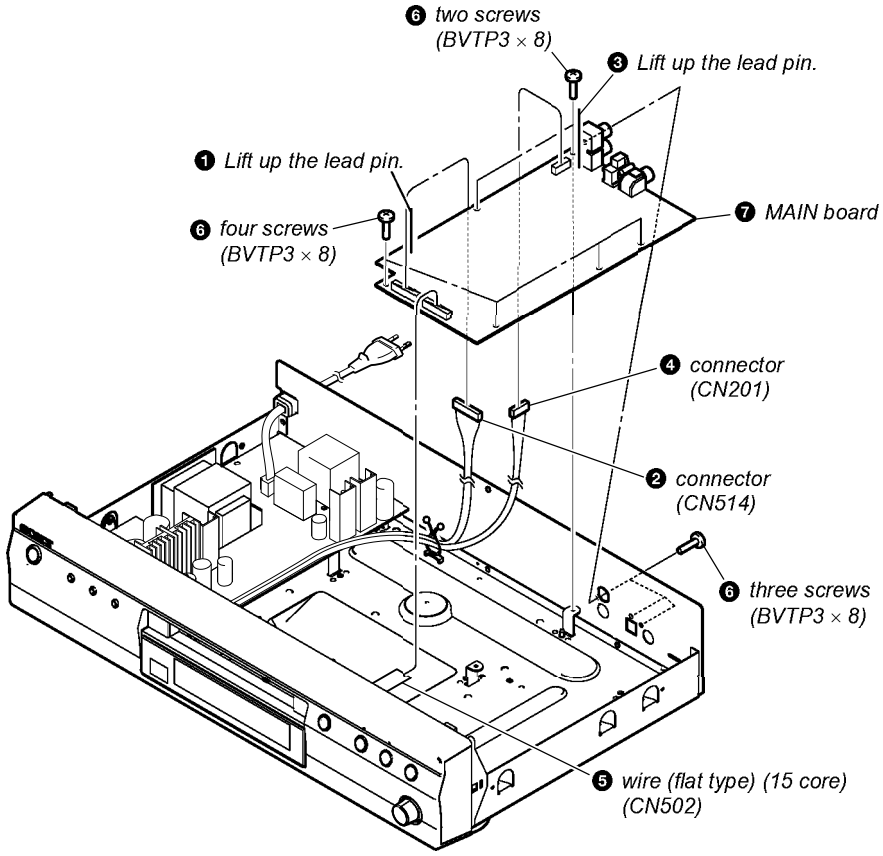
2-6. CD MECHANISM DECK BLOCK (CDM66F1-DVBU101)

Note 1: When disconnecting the flat type (24 core) wire of optical pick-up block, solder the short-land.

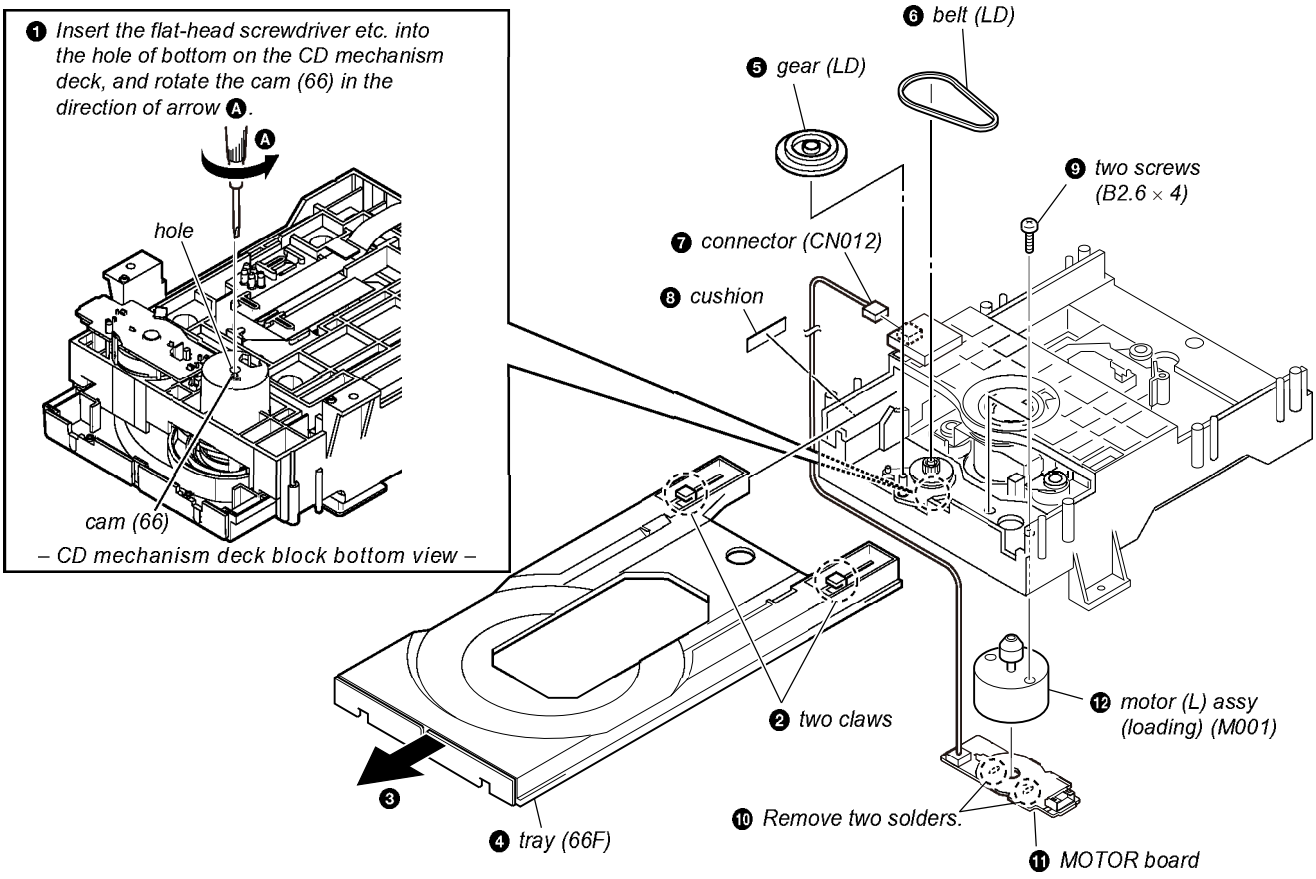

❺ four claws
– CD mechanism deck block bottom view –
❻ Solder the short-land.
Note 2: When assembling the optical pick-up block, remove the solder of short-land after connecting the flat type (24 core) wire.


❸ three screws (B3)
❽ CD mechanism deck block (CDM66F1-DVBU101)
❼ flat type (24 core) wire (CN1101)
❷ connector (CN1201)
❹
❶ connector (CN010)

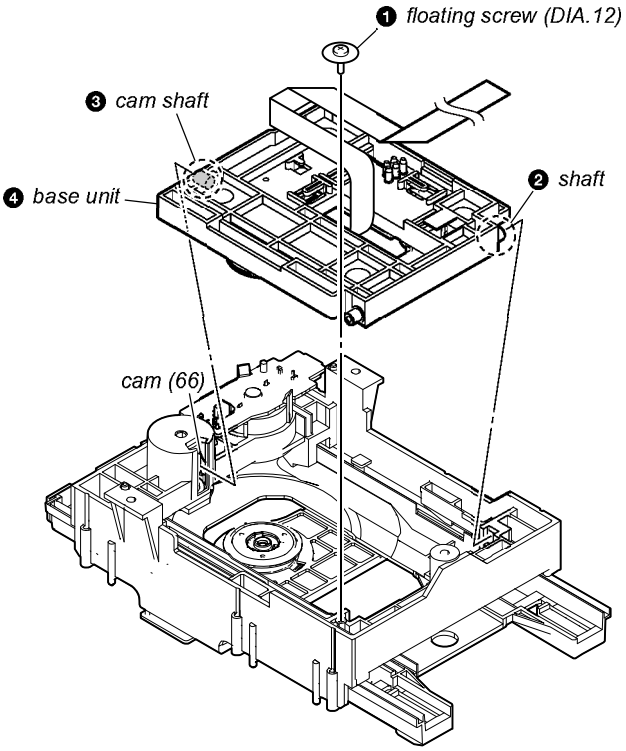
2-7. MAIN BOARD



2-8. BELT (LD), MOTOR BOARD, MOTOR (L) ASSY (LOADING) (M001)

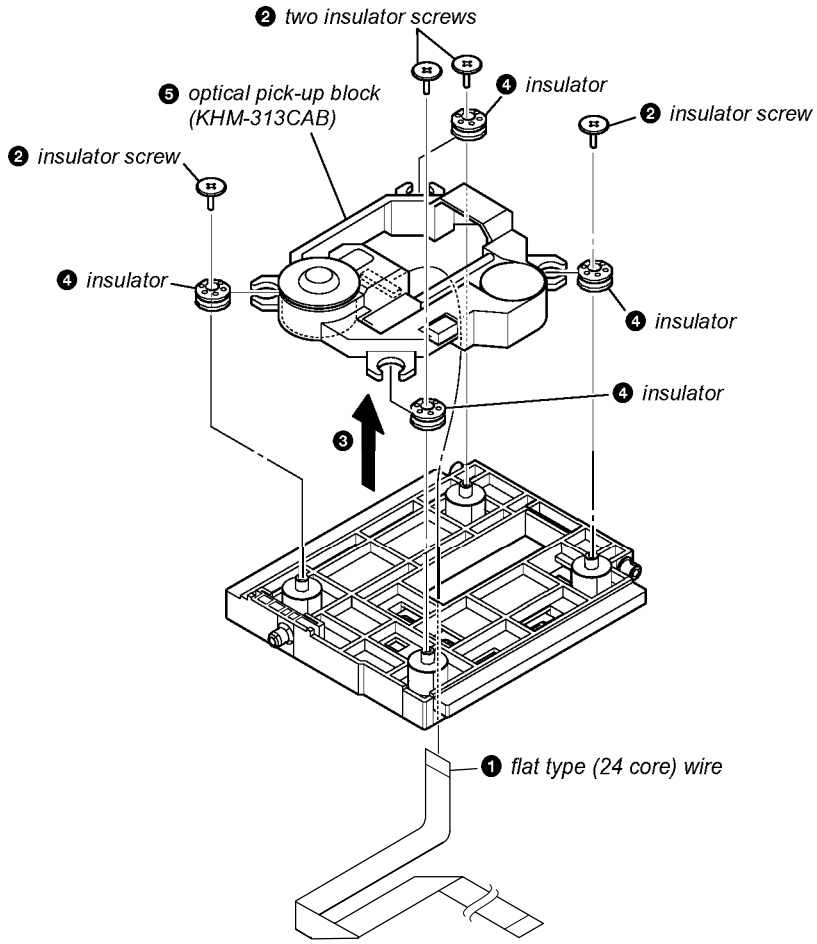

❶ Insert the flat-head screwdriver etc. into the hole of bottom on the CD mechanism deck, and rotate the cam (66) in the direction of arrow Ⓐ.
Ⓐ
hole
cam (66)
– CD mechanism deck block bottom view –
❻ belt (LD)
❺ gear (LD)
❾ two screws
(B2.6 × 4)
❼ connector (CN012)
❽ cushion
❷ two claws
❸
❹ tray (66F)
⓬ motor (L) assy
(loading) (M001)
❿ Remove two solders.
⓫ MOTOR board

2-9. BASE UNIT



– CD mechanism deck block bottom view –

2-10. OPTICAL PICK-UP BLOCK (KHM-313CAB)



SECTION 3
TEST MODE

Note 1: According to the following procedures when you ship it (Return it to the customer).
1. SERVICE MODE (1) of step 6 and 7 (EEPROM clearness)
2. COLD RESET

When the service mode is operated, the following, remote commander is necessary.
(The service mode cannot be operated by remote commander to which this machine is attached)
Remote commander (RM-ASP004): Part No. 1-479-272-21

Note: Above-mentioned remote commander is one example. If it is the one printed under a remote commander as "DVD", any remote commander can be operated.

COLD RESET

The cold reset clears data stored in microcomputer's RAM to initial conditions.

Procedure:

1. Press three buttons of [■], [⏏] and [I/⏻] on the set simultaneously.
2. "COLD RESET" appears on the fluorescent indicator tube. After that, the fluorescent indicator tube becomes blank then the system becomes standby states.

PANEL TEST

Procedure:

1. Press the [I/⏻] button to turn on.
2. Press three buttons of [■], [⏮ AMS ⏭, PUSH ENTER] and [I/⏻] on the set simultaneously.
3. All segments turned on.
4. When [■] button on the set is pressed after half segments in fluorescent indicator tube light up. If you press [■] button on the set again, another half segments in fluorescent indicator tube light up. Pressing [■] button on the set again would cause all segments in fluorescent indicator tube light up.
5. When the [⏮] button on the remote commander is pressed, "FY10SCD" and the model name are displayed on the fluorescent indicator tube.
   Note: Each time that the [⏮] button on the remote commander is pressed, the information displayed on the fluorescent indicator tube changes in the order of Destination, MC version, SYS version, UI version, DVD version, TA version and DSP version. However, this cannot be used in service.
6. Press [►] button on the set, in the key check mode, the fluorescent indicator tube displays "K0 J0".
7. Each time an another button is pressed, "KEY" value increases. However, once a button is pressed, it is no longer taken into account. When all keys are pressed correctly, "K9" and "OK" are alternately displayed.
8. When the [⏮ AMS ⏭, PUSH ENTER] dial on the set is turned in the direction of right,"J0" is changed to "J1", then ... "J9". When the [⏮ AMS ⏭, PUSH ENTER] dial on the set is turned in the direction of left, "J0" is changed to "J9", then ... "J0".
9. To release from this mode, press three buttons in the same manner as step 2.

CDM TEST

Aging test mode of CDM.

Procedure:

1. Press three buttons of [⏸], [⏏] and [I/⏻] on the set simultaneously.
2. After the "Open" display blinks, "SINGLE LOADING" is displayed on the fluorescent indicator tube.
3. Press [⏮ AMS ⏭, PUSH ENTER] and then aging starts.
4. To stop aging, Press [■] button.
5. To release from this mode, press three buttons of [⏸], [⏏] and [I/⏻] on the set simultaneously.

SERVICE MODE (1)

In this mode, a variety of information is displayed on the fluorescent indicator tube. Refer to the following table for displayed various information.

EEPROM CLEAR

Procedure:

1. Press two buttons of [■] and [⏏] on the set simultaneously for 3 seconds.
2. Various information is displayed on the fluorescent indicator tube.
3. When [↑] button is pressed of the remote commander. Rebooting emergence factor appears of toggle article number on the fluorescent indicator tube.
4. When [→] button is pressed of the remote commander. MTK communication error factor appears of toggle article number on the fluorescent indicator tube.
5. When [↓] button is pressed of the remote commander. Power ON/OFF error factor appears of toggle article number on the fluorescent indicator tube.
6. Press the button in order of the [4] → [TIME/TEXT] → [CLEAR] on the remote commander of attachment.
7. The message "Complete" is displayed on the fluorescent indicator tube, and EEPROM is cleared.

Note: Don't press the [I/⏻] button when to release from this mode. Necessarily disconnect the power cord. The set doesn't operate when turning off power with [I/⏻] button of the set.

List of trouble log

Note: "nnn" of toggle article number is a generation frequency of the error.

Type	Test key (Remote commander)	Toggle article number	Content
Rebooting emergence (Rebooting emergence factor)	Test key2 (↑)	2Annn	It was not possible to communicate with MTK five seconds more continuously
		2Bnnn	Compulsion power off demand was received from MTK
		2Cnnn	Only MTK reset it (Destination, model and region for are the disagreements)
		2Dnnn	Fails in the start of MTK
		2Ennn	Fails in the switch of the input mode of MTK
		2Fnnn	Input mode of MTK changed without permission
		2Gnnn	Reacts to the key notification no though the communication with MTK is alive
Serial communications (MTK communication error factor)	Test key3 (→)	3Annn	It was not possible to communicate with MTK with 48ms
		3Bnnn	A non-standard packet length was received (Excluding 16 bytes)
		3Cnnn	Checksum NG
		3Dnnn	Type of the communication header is NG
MTK power control (Power ON/OFF error factor)	Test key4 (↓)	4Annn	Fails in AC ON Initial
		4Bnnn	Fails in power on of MTK
		4Cnnn	Initialization response of CDM is abnormal
		4Dnnn	CDM mechanism error notification is received
		4Ennn	Input mode is NG MTK is started
		4Fnnn	MTK input mode switch at time fails usually
		4Gnnn	Fails in power off of MTK
		4Hnnn	Fails in power off of CDM

SERVICE MODE (2)

Note: SERVICE MODE (2) is a service mode of Super Audio CD.

1. Service Mode (2) General Description

This mode let you make diagnosis and adjustment easily by using the remote commander and the TV screen for Composite input. The instructions, diagnostic results, etc. are given on the TV screen.

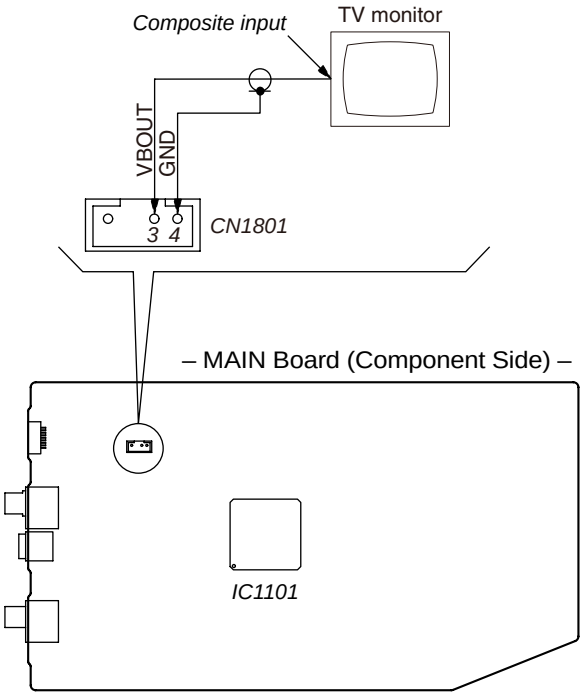
Be sure to execute the IOP measurement when a base unit is replaced.

Preparations:

Prepare a TV monitor that has a Composite input.

Connection Procedures:

Connect the TV monitor to CN1801 on the MAIN board as shown in the diagram.



2. Entering Service Mode (2)

Procedure:

1. Press the [I/⏻] button to turn the power on.
2. Press two buttons of [■] and [⏏] on the set simultaneously for 3 seconds
3. The message “SERVICE IN” appears on the fluorescent indicator tube and top menu of the Remocon Diagnosis Menu appears on the on-screen display on the TV screen for Composite input as follows. The model name, IF-con version and Syscon version are displayed at the bottom of the on-screen display.

```
        Remocon Diagnosis Menu

0. External Chip Check
1. Servo Parameter Check
2. Drive Manual Operation
3. Emergency History
4. Version Information



Model Name :xxx-xxxxx
IF-con:Ver.xx.xx(xxxx)
Syscon:Ver.x.xxx
```

4. To execute each function, press its number by using numeric button on the remote commander.
5. To release from this mode, disconnect the power cord.

Note: Don't press the [I/⏻] button when to release from this mode. Necessarily disconnect the power cord. The set doesn't operate when turning off power with [I/⏻] button of the set.

3. Executing IOP Measurement

In order to execute IOP measurement, the following standard procedures must be followed.

Procedure:

1. From the top menu of Remocon Diagnosis Menu, select “2 Drive Manual Operation” by pressing the [2] button on the remote commander. The following screen appears on the on-screen display

```
        Drive Manual Operation

1. Servo Control
2. Track/Layer Jump
3. Manual Adjustment
4. Mecha test mode
5. MIRR time Adjust
0. Return to Top Menu
```

2. Select “3. Manual Adjustment” by pressing the [3] button on the remote commander. The following screen appears on the on-screen display.

```
            Manual Adjust
1. Track Balance Adjust:
2. Track Gain Adjust:
3. Focus Balance Adjust:
4. Focus Gain Adjust:
5. Eq Boost Adjust:
6. Iop:
7. TRV. Level:
8. S curve(FE) Level:
9. RFL(PI) Level:
0. MIRR Time:
[🡅][🡇]  Change Value
[RETURN]Return to previous menu
```

3. Select “6. Iop:” by pressing [6] button on the remote commander.
4. Wait until a hexadecimal number appear in the on-screen display as below.

```
                Manual Adjust
1. Track Balance Adjust:
2. Track Gain Adjust:
3. Focus Balance Adjust:
4. Focus Gain Adjust:
5. Eq Boost Adjust:
6. Iop: xx
7. TRV. Level:
8. S curve(FE) Level:
9. RFL(PI) Level:
0. MIRR Time:
[↑][↓] Change Value
[RETURN]Return to previous menu
```

5. Convert data from hexadecimal to decimal by using conversion table.
6. If the value is smaller than 93 (decimal), then it is OK. However if the value is higher than 93, then BU (base unit) is defective and need to be change.
7. Press the [↶ RETURN] button on the remote commander to return to previous menu.
8. Press the [0] button on the remote commander to return to the top menu of Remocon Diagnosis Menu.
9. Disconnect the power cord to turn off.

Note: Don't press the [I/⏻] button when to release from this mode. Necessarily disconnect the power cord. The set doesn't operate when turning off power with [I/⏻] button of the set.

4. Checking Emergency History

To check the emergency history, please follow the following procedure.

Procedure:

1. From the top menu of Remocon Diagnosis Menu, select "3. Emergency History" by pressing the [3] button on the remote commander. The following screen appears on the on-screen display.

```
          Emg. History Check
Laser Hours     CD    999h  59min
                DVD     0h   0min

01. 01 05 04 04      00 92 46 00
    00 00 00 00      00 00 23 45

02. 02 02 01 01      00 A9 4B 00
    00 00 00 00      00 00 23 45


[Next]Next page [Prev]Prev page
[0]Return to Top Menu
```

2. You can check the total time when the laser is turned on during playback of Super Audio CD and CD from the above menu. The maximum time, which can be displayed are 999h 59min.
3. You can check the error code of latest 10 emergency history from the above menu. To view the previous or next page of emergency history, press the [⏮] or [⏭] button on the remote commander.

The error code consists of three kinds of error codes.

A. Error code

```
          Example of Error code

01. 01 05 04 04      00 92 46 00
    00 00 00 00      00 00 23 45
```

The meaning of error code is as below:

01: Communication error (No reply from syscon)
02: Syscon hung up
03: Power OFF request when syscon hung up
19: Thermal shutdown
24: MoveSledHome error
25: Mechanical move error (5 changer)
26: Mechanical move stack error
30: DC motor adjustment error
31: DPD offset adjustment error
32: TE balance adjustment error
33: TE sensor adjustment error
34: TE loop gain adjustment error
35: FE loop gain adjustment error
36: Bad jitter after adjustment
40: Focus NG
42: Focus layer jump NG
51: Spindle stop error
52: Open kick spindle error
60: Focus on error
61: Seek fail error
62: Read Q data/ID error
70: Lead in data read fail
71: TOC read time out (CD)
80: Can't buffering
81: Unknown media type

B. Parameter of error code

This is the detail of error code.

```
          Example of Error code

01. 01 05 04 04      00 92 46 00
    00 00 00 00      00 00 23 45
```

C. Time of error code

This is the laser time when an error occurred.

```
          Example of Error code

01. 01 05 04 04      00 92 46 00
    00 00 00 00      00 00 23 45
```

To Clear Laser Hours and Emergency History

Perform Step 6. for EEPROM CLEAR of SERVICE MODE (1).

Note: You will not be able to clear only one of either Laser Hours or Emergency History. When EEPROM CLEAR is run, all content will be deleted.

```
          Version information



Initialize all data...
Complete!




[0]Return to Top Menu
```

```
          Emg. History Check
Laser Hours     CD      0h   0min
                DVD     0h   0min

01. 00 00 00 00      00 00 00 00
    00 00 00 00      00 00 00 00

02. 00 00 00 00      00 00 00 00
    00 00 00 00      00 00 00 00


[Next]Next page [Prev]Prev page
[0]Return to Top Menu
```

To Execute the Initialize Setup Data

Procedure:

1. Press the [MENU] button on the remote commander and then press the [CLEAR] button on the remote commander. The following screen appears on the on-screen display.

```
          Emg. History Check
Laser Hours     CD    999h  59min
                DVD     0h   0min

Initialize setup data...




[Next]Next page [Prev]Prev page
[0]Return to Top Menu
```

2. The screen after a while returns to former display.

To Return to the Top Menu of Remocon Diagnosis Menu

Press the [0] button on the remote commander.

5. Checking Version Information

To check the version information, please follow the following procedure.

Procedure:

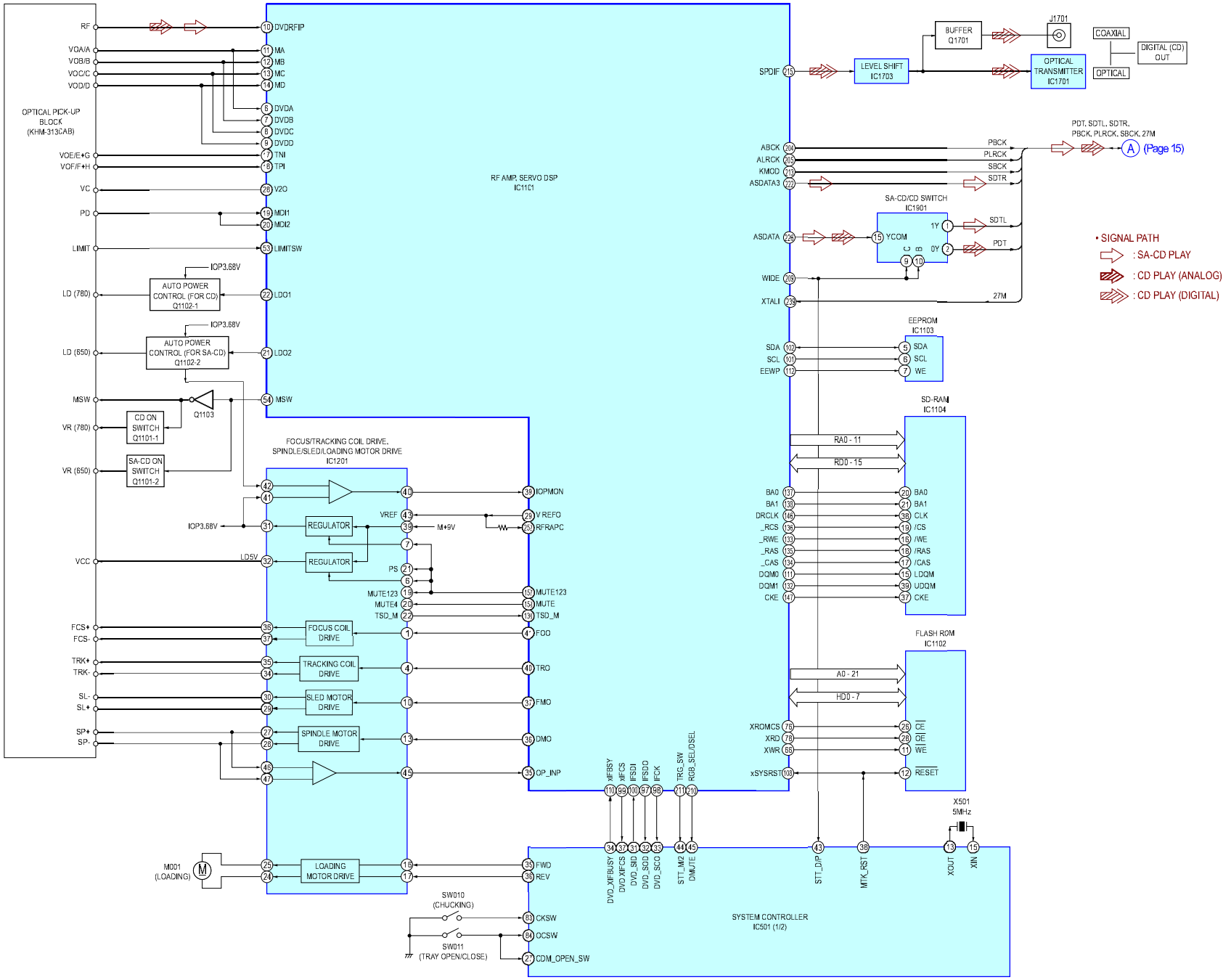
1. From the top menu of Remocon Diagnosis Menu, select "4. Version Information" by pressing the [4] button on the remote commander. The following screen appears on the on-screen display.

```
          Version information

Firm(Main): Ver. X.XXXX
Firm(Sub): XX.XX
RISC: XXXXXX
8032: XXXXXX
Audio DSP: XX.XX.XX.XX
Servo DSP: XX.XX.XX.XX



[0]Return to Top Menu
```

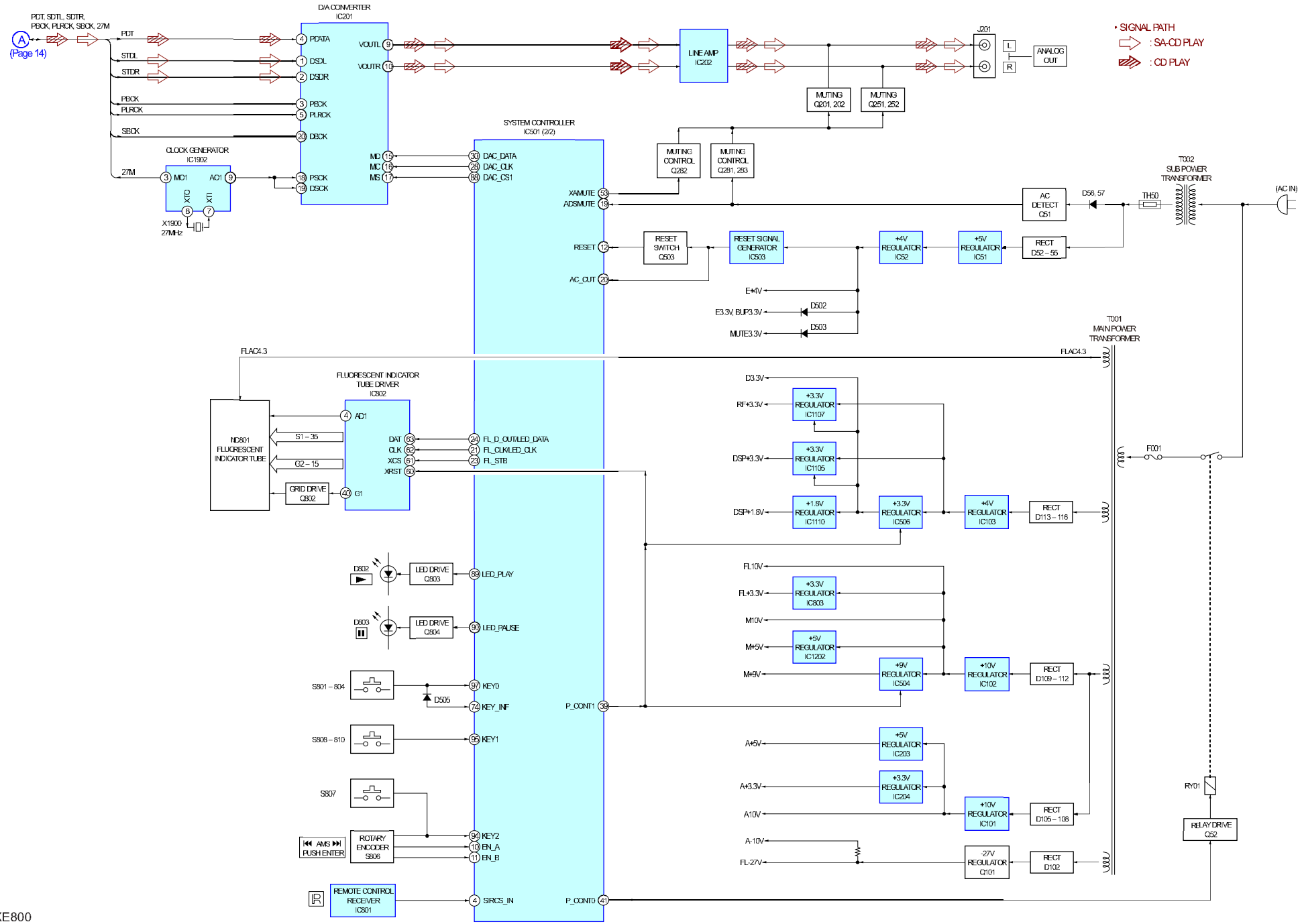
2. To return to the top menu of Remocon Diagnosis Menu, press the [0] on the remote commander.

SECTION 4
DIAGRAMS

4-1. BLOCK DIAGRAM - RF/SERVO, MAIN Section -



4-2. BLOCK DIAGRAM - PANEL, POWER SUPPLY Section -



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

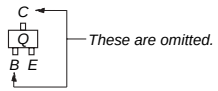
For Printed Wiring Boards.

Note:

- ○——: Parts extracted from the component side.
- ——: parts extracted from the conductor side.
- △ : internal component.
- ▬: Pattern from the side which enables seeing.
  (The other layers' patterns are not indicated.)

Caution:
Pattern face side: (Conductor Side) Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side) Parts on the parts face side seen from the parts face are indicated.

- MAIN board is multi-layer printed board.
  However, the patterns of intermediate layers have not been included in diagrams.
- Indication of transistor.



These are omitted.

For Schematic Diagrams.

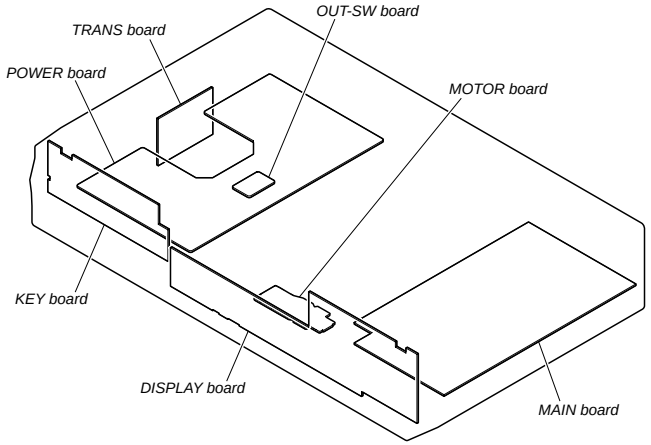
Note:

- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭: panel designation.

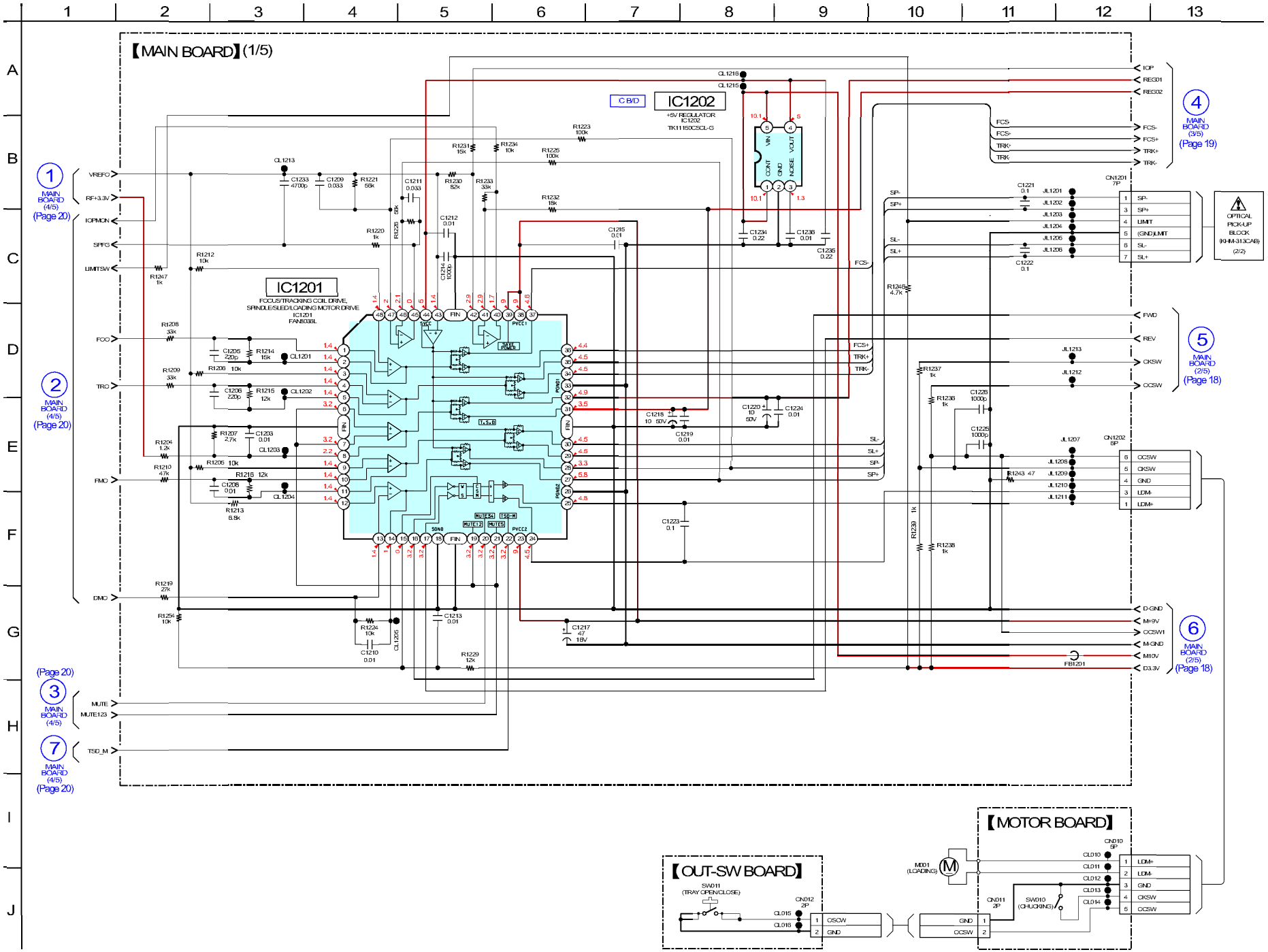
Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- ▬▬: B+ Line.
- ▬ ▬ ▬: B– Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark: CD PLAY
  * : Impossible to measure
- Voltages are taken with VOM (Input impedance 10 MΩ).
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : SA-CD PLAY
  ⇨ : CD PLAY (ANALOG)
  ⇨ : CD PLAY (DIGITAL)

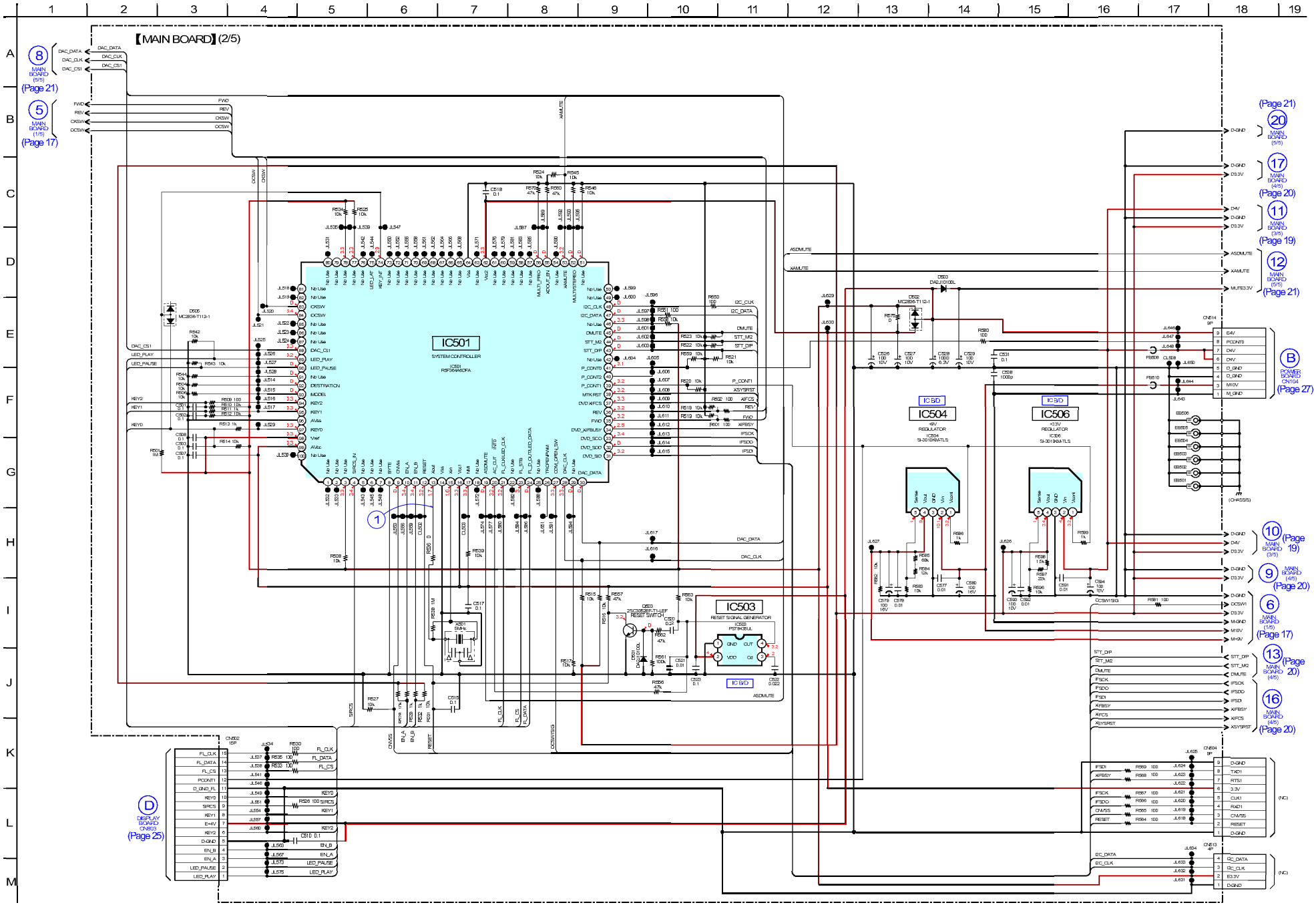
- Circuit Boards Location



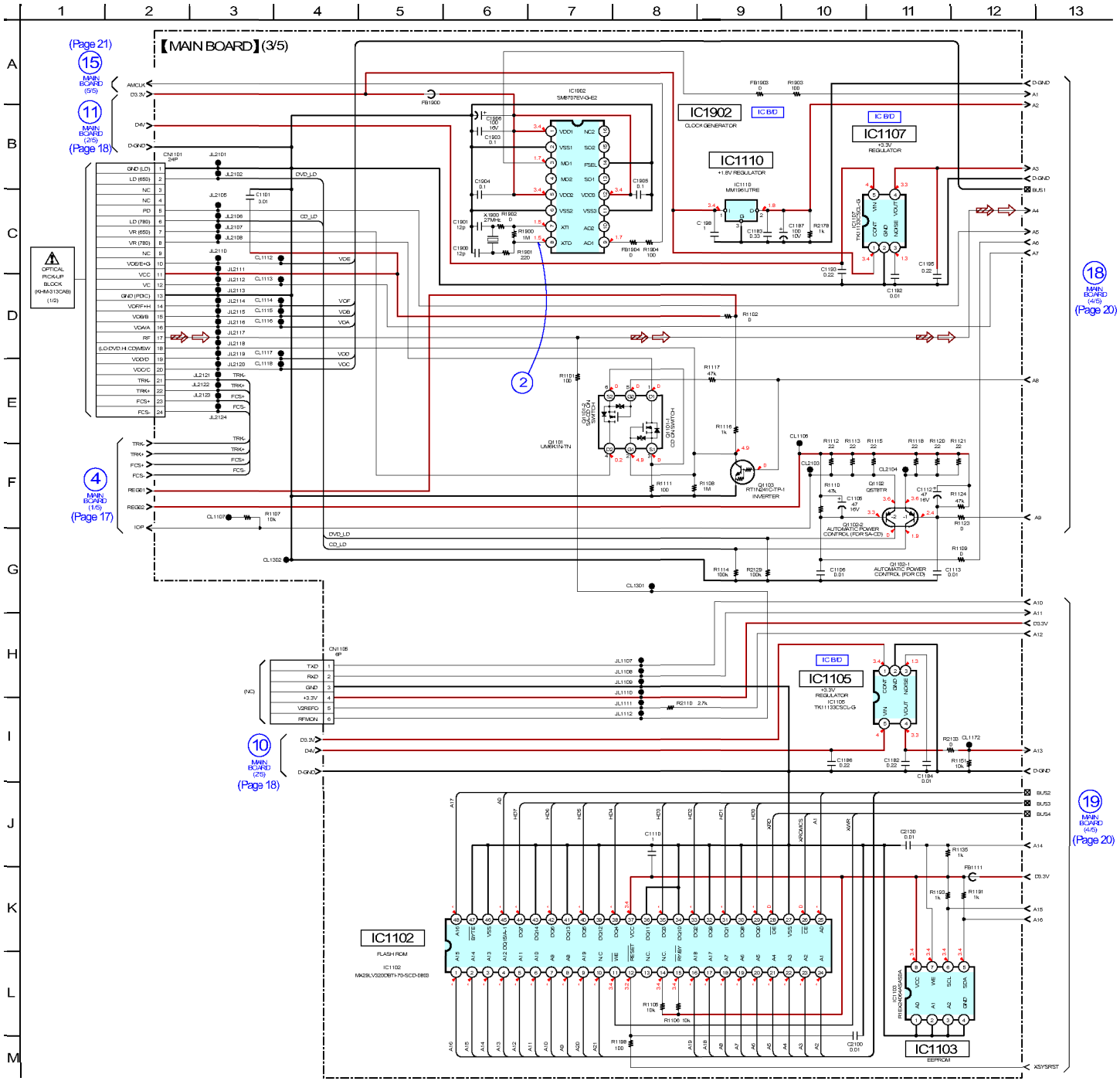
4-3. SCHEMATIC DIAGRAM - MAIN Section (1/5) - • See page 28 for IC Block Diagrams.



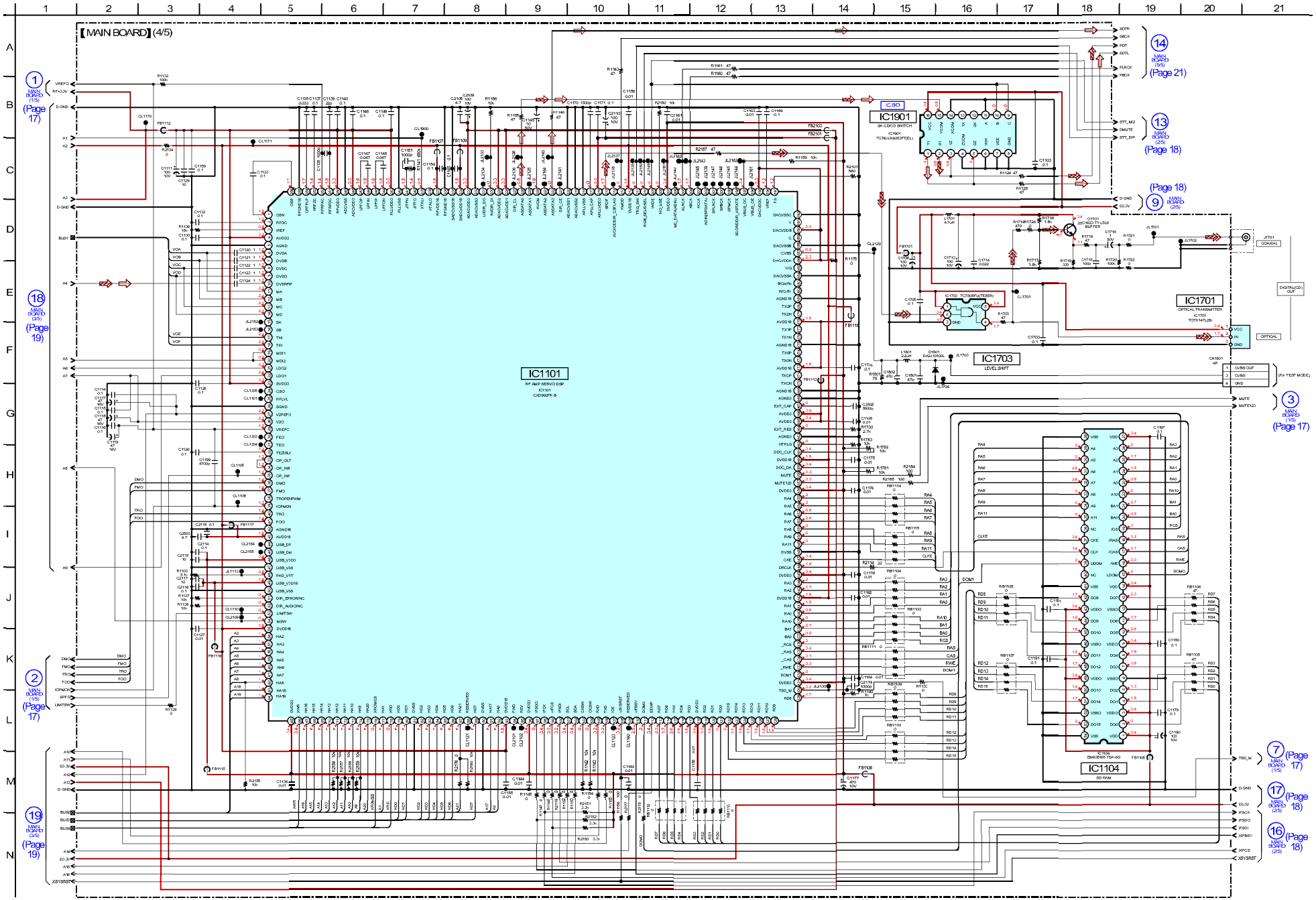
4-4. SCHEMATIC DIAGRAM - MAIN Section (2/5) - • See page 28 for Waveforms. • See page 28 for IC Block Diagrams. • See page 30 for IC Pin Function Description.



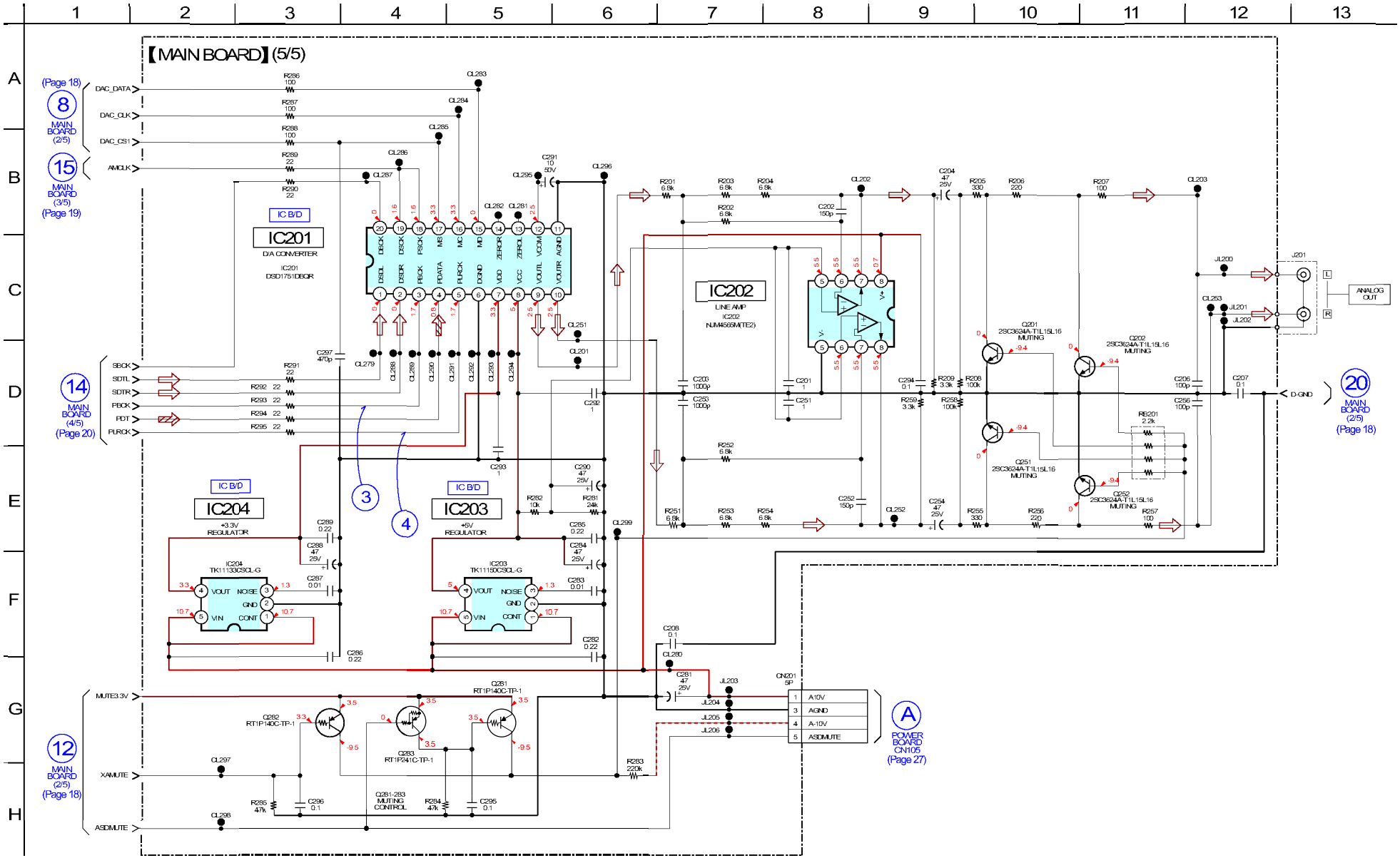
4-5. SCHEMATIC DIAGRAM - MAIN Section (3/5) - • See page 28 for Waveforms. • See page 28 for IC Block Diagrams.



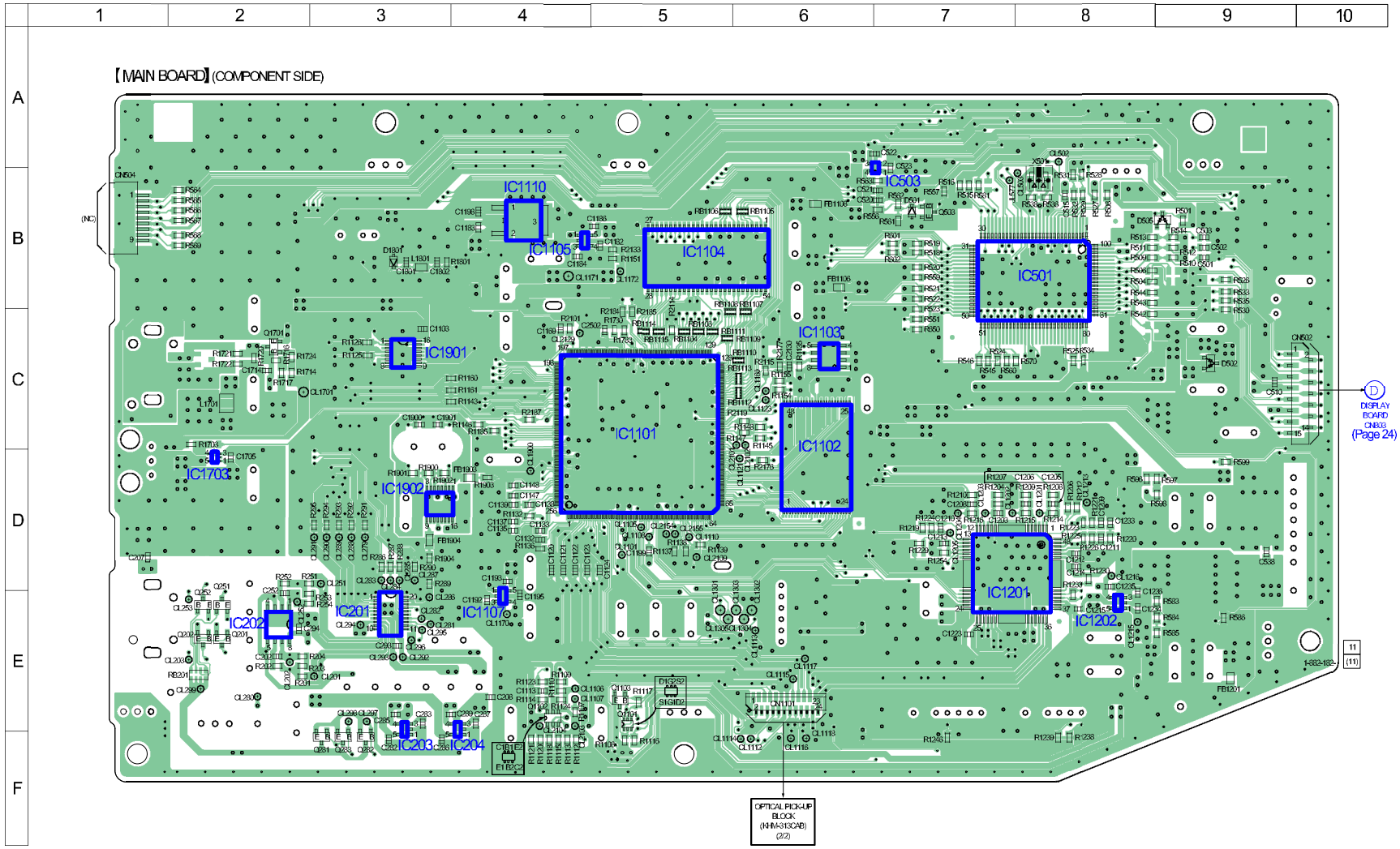
4-6. SCHEMATIC DIAGRAM - MAIN Section (4/5) - • See page 28 for IC Block Diagrams. • See page 30 for IC Pin Function Description.



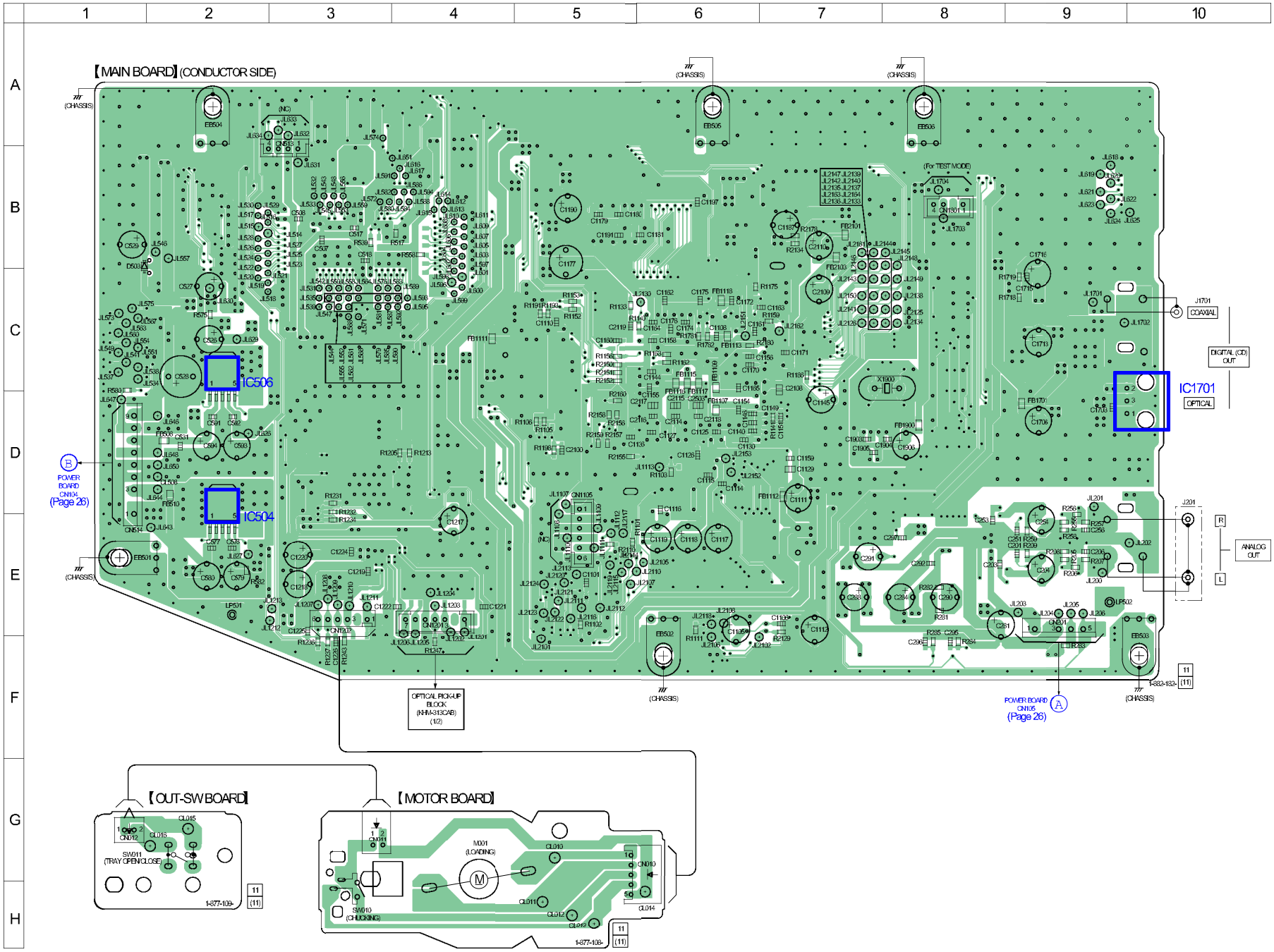
4-7. SCHEMATIC DIAGRAM - MAIN Section (5/5) - • See page 28 for Waveforms. • See page 28 for IC Block Diagrams.



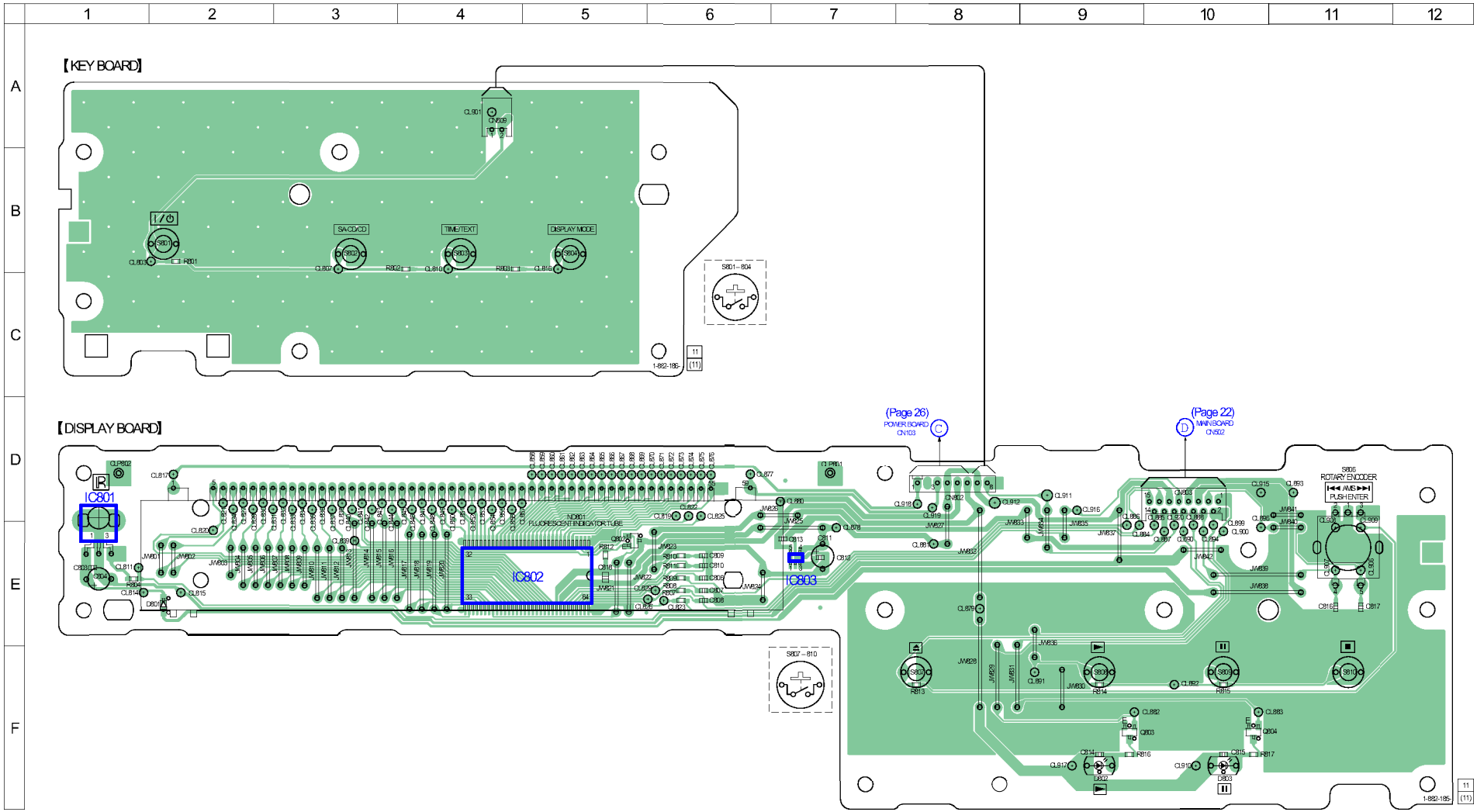
4-8. PRINTED WIRING BOARD - MAIN Section (1/2) - • See page 16 for Circuit Boards Location. • : Uses unleaded solder.



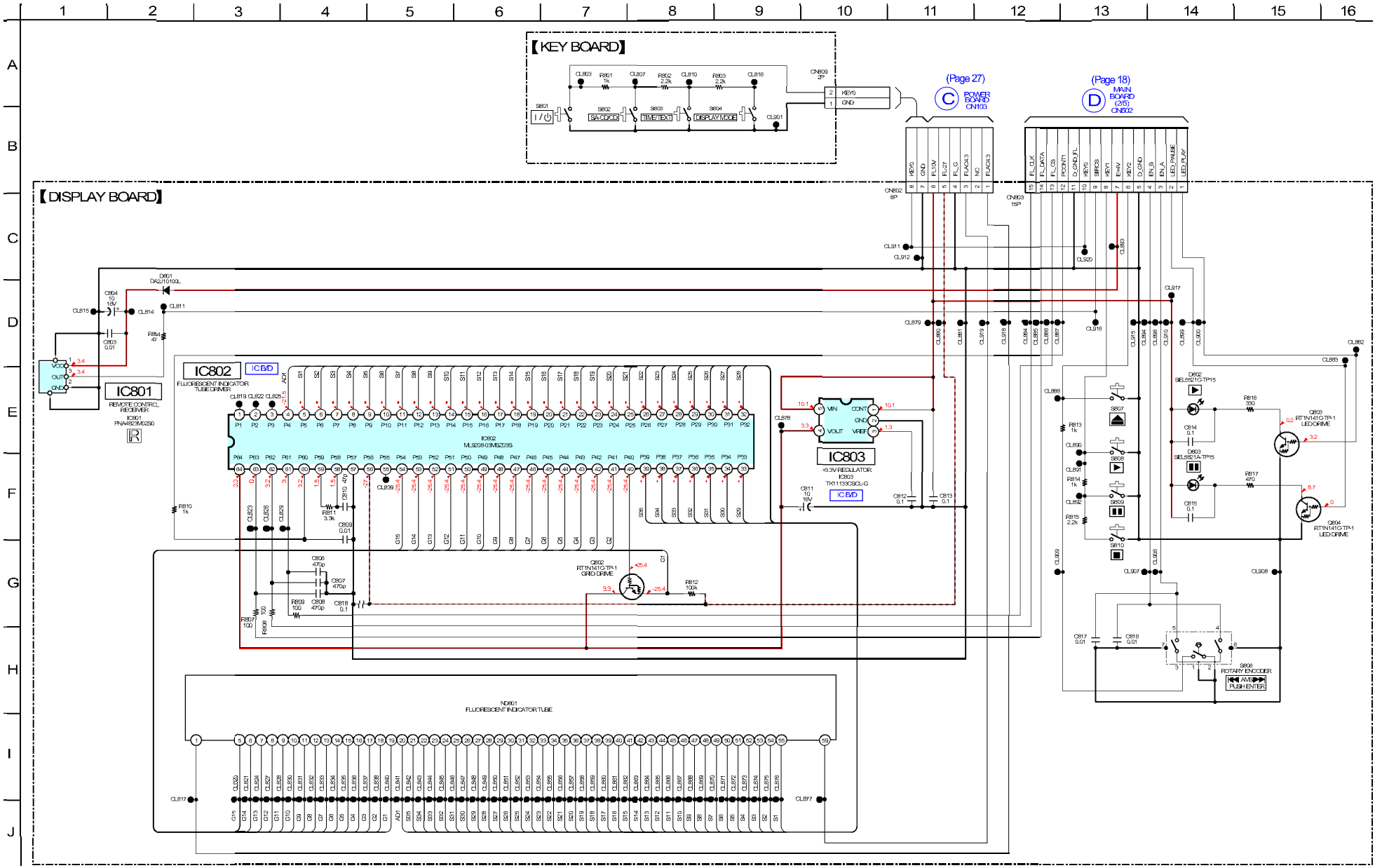
4-9. PRINTED WIRING BOARDS - MAIN Section (2/2) - • See page 16 for Circuit Boards Location. • : Uses unleaded solder.



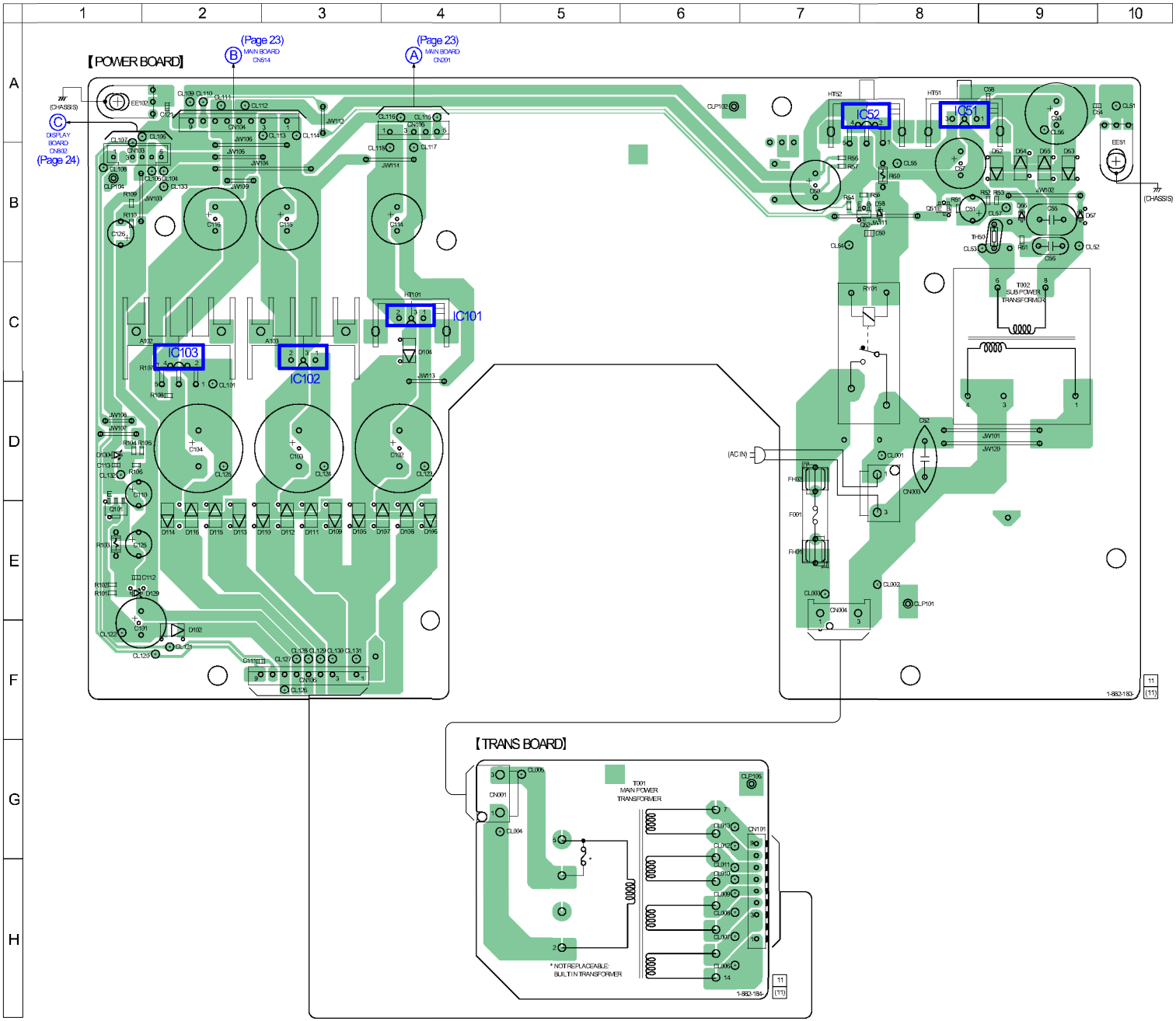
4-10. PRINTED WIRING BOARDS - PANEL Section - • See page 16 for Circuit Boards Location. • : Uses unleaded solder.



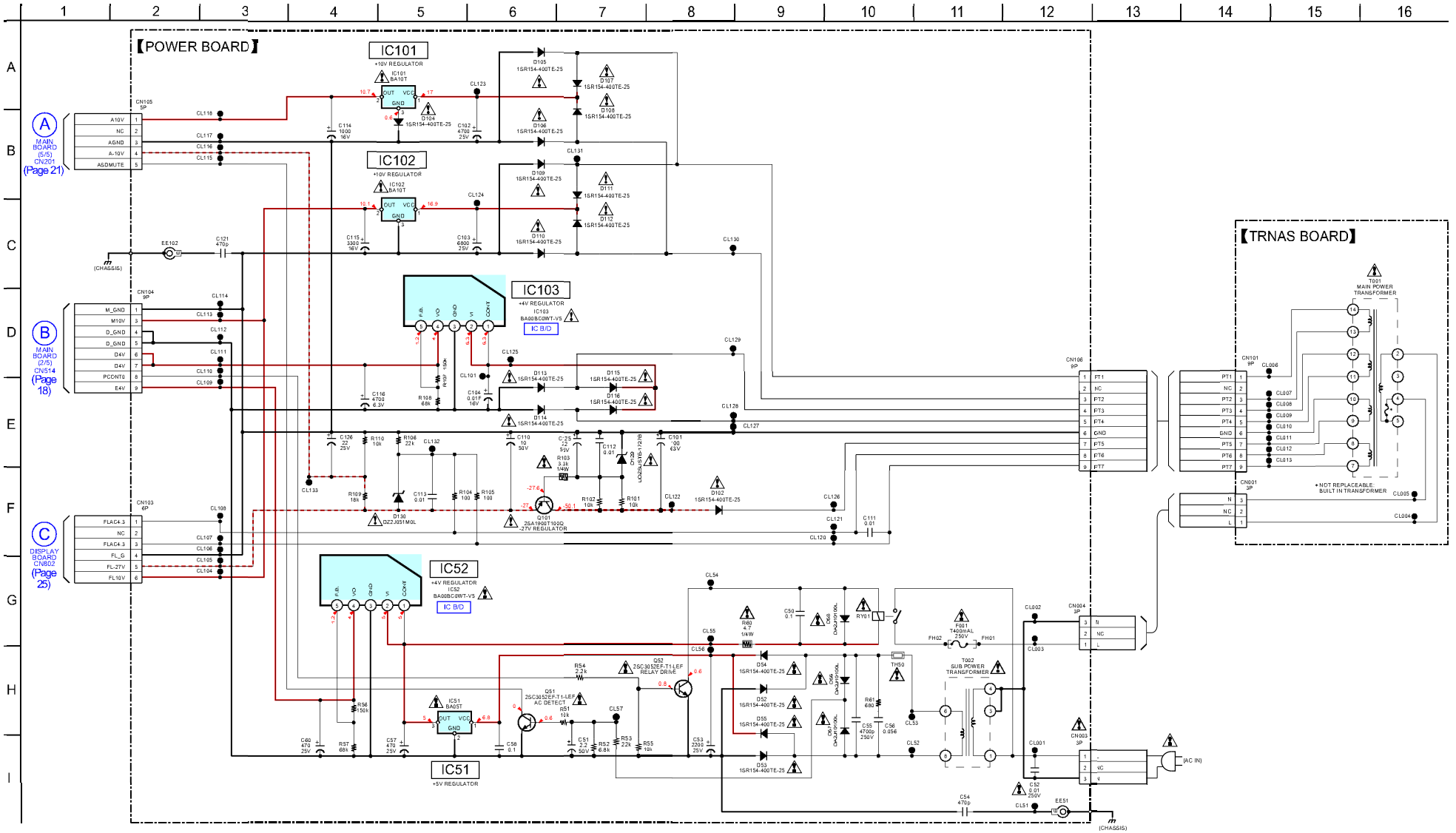
4-11. SCHEMATIC DIAGRAM - PANEL Section - • See page 28 for IC Block Diagrams.



4-12. PRINTED WIRING BOARDS - POWER Section - • See page 16 for Circuit Boards Location. • : Uses unleaded solder.



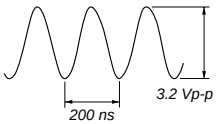
4-13. SCHEMATIC DIAGRAM - POWER Section - • See page 28 for IC Block Diagrams.



• Waveforms

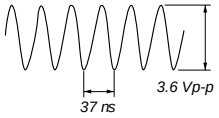
– MAIN Board –

① IC501 ⑬ (Xout)



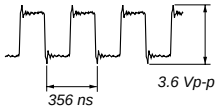
1 V/DIV, 100 ns/DIV

② IC1902 ⑧ (XTO)



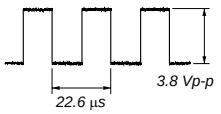
1 V/DIV, 20 ns/DIV

③ IC201 ③ (PBCK)



1 V/DIV, 200 ns/DIV

④ IC201 ⑤ (PLRCK)

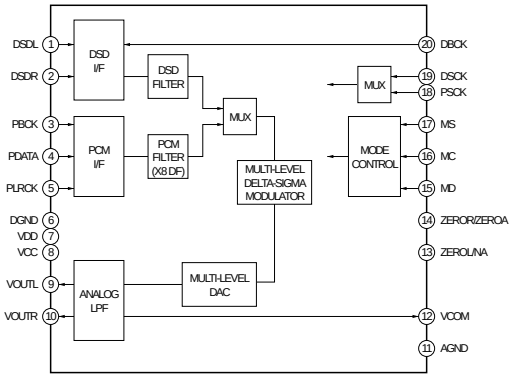


1 V/DIV, 10 µs/DIV

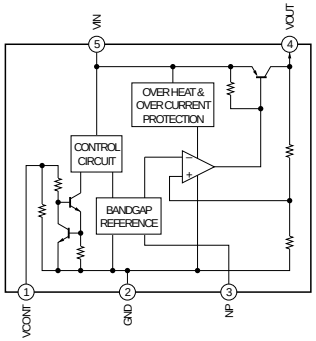
• IC Block Diagrams

– MAIN Board –

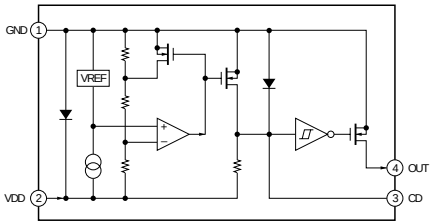
IC201 DSD1751DBQR



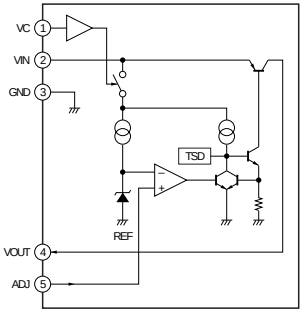
IC203, 1202 TK11150CSCL-G
IC204, 1105, 1107 TK11133CSCL-G



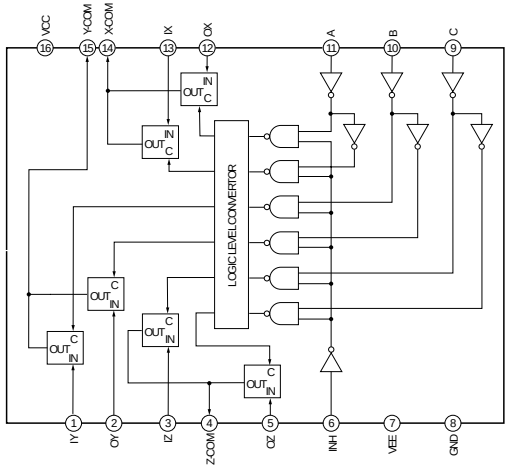
IC503 PST8435UL



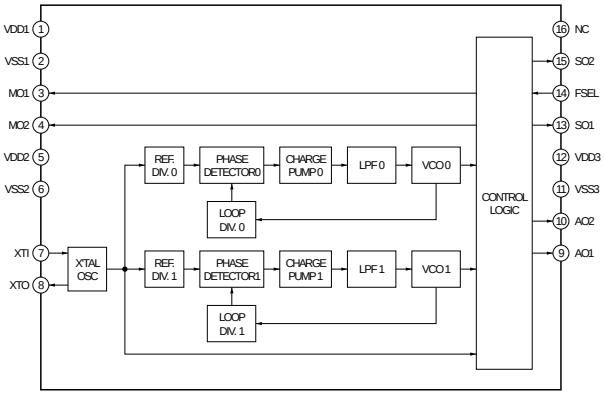
IC504, 506 SI-3010KM-TLS



IC1901 TC74LVX4053FT (EL)

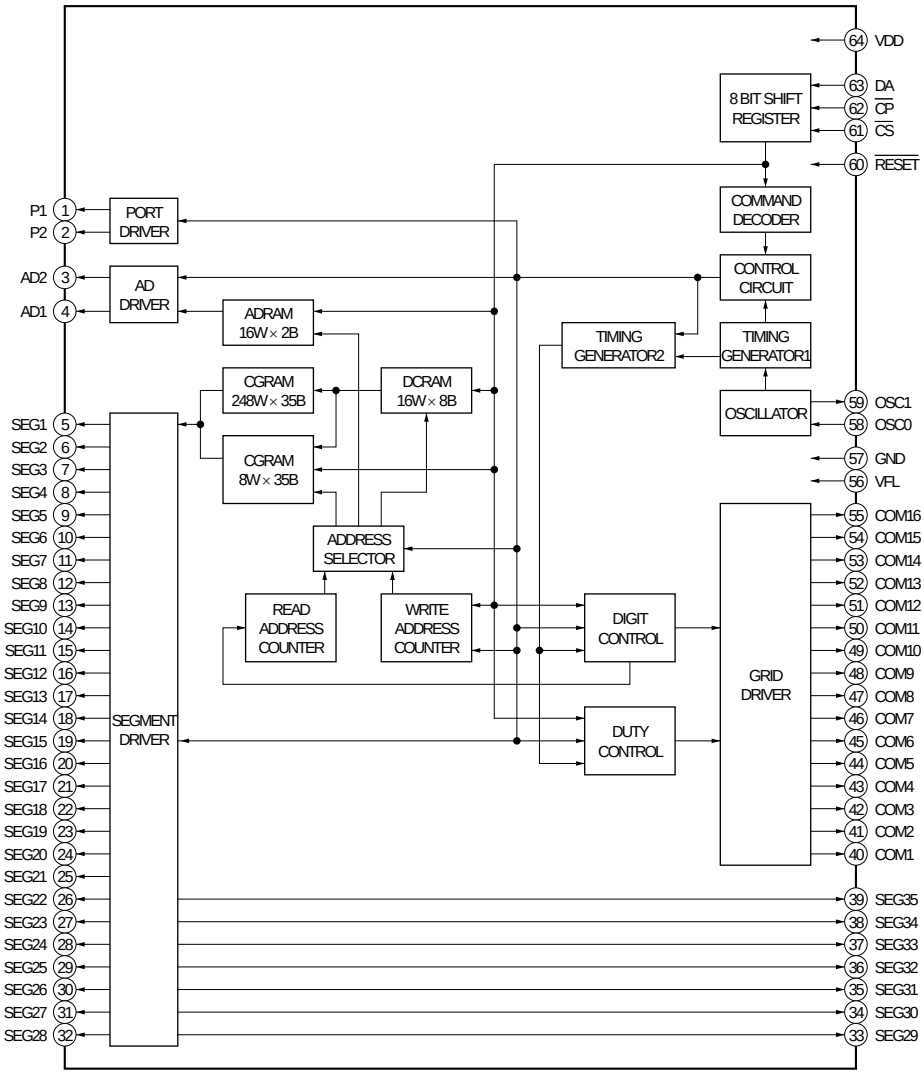


IC1902 SM8707EV-G-E2

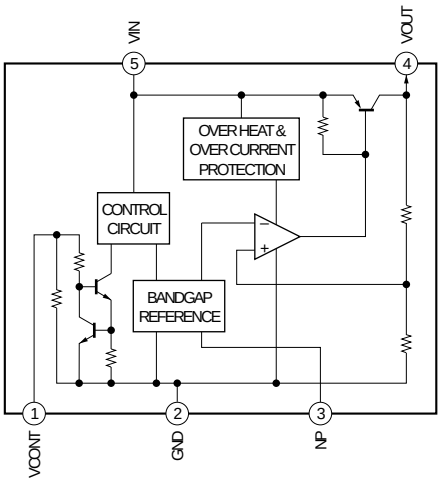


– DISPLAY Board –

IC802 ML9208-03MBZ03B

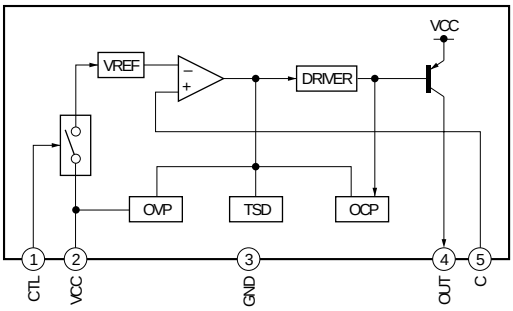


IC803 TK11133CSCL-G



– POWER Board –

IC52, 103 BA00BC0WT-V5



• IC Pin Function Description

MAIN BOARD IC501 R5F364A6DFA (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1, 2	No Use	O	Not used
3	No Use	I	CEC serial data input from the HDMI OUT connector Fixed at “H” in this set
4	SIRCS_IN	I	SIRCS signal input from the remote control receiver
5 to 7	No Use	O	Not used
8	BYTE	I	External data bus width selection signal input terminal Fixed at “L” in this set
9	CNVSS	I	Processor mode switch input terminal
10	EN_A	I	Jog dial pulse input from the rotary encoder (A phase input)
11	EN_B	I	Jog dial pulse input from the rotary encoder (B phase input)
12	RESET	I	System reset signal input from the reset signal generator “L”: reset For several hundreds msec. after the power supply rises, “L” is input, then it change to “H”
13	Xout	O	Main system clock output terminal (5 MHz)
14	Vss	-	Ground terminal
15	Xin	I	Main system clock input terminal (5 MHz)
16	Vcc1	-	Power supply terminal (+3.3V)
17	NMI	I	Non-maskable interrupt input terminal Fixed at “H” in this set
18	No Use	O	Not used
19	ASDMUTE	I	AC detection signal input terminal
20	AC_CUT	I	AC cut detection signal input terminal “L”: AC cut on
21	FL_CLK/LED_CLK	O	Serial data transfer clock signal output to the fluorescent indicator tube driver
22	No Use	O	CEC serial data output to the HDMI OUT connector Not used
23	FL_STB	O	Chip select signal output to the fluorescent indicator tube driver
24	FL_D_OUT/LED_DATA	O	Serial data output to the fluorescent indicator tube driver
25	No Use	O	Not used
26	TROPENPWM	O	Tray speed PWM control signal output terminal Not used
27	CDM_OPEN_SW	I	Disc tray open/close detection switch input terminal “L”: disc tray is closed
28	DAC_CLK	O	Serial data transfer clock signal output to the D/A converter
29	No Use	I	Not used
30	DAC_DATA	O	Serial data output to the D/A converter
31	DVD_SID	O	Serial data output to the servo DSP
32	DVD_SOD	I	Serial data input from the servo DSP
33	DVD_SCO	I	Serial data transfer clock signal input from the servo DSP
34	DVD_XIFBUSY	O	Busy signal output to the servo DSP
35	FWD	O	Loading motor drive signal output terminal (forward direction)
36	REV	O	Loading motor drive signal output terminal (reverse direction)
37	DVD_XIFCS	I	Chip select signal input from the servo DSP
38	MTK RST	O	Reset signal output to the servo DSP and flash memory “L”: reset
39	P_CONT1	O	Power on/off control signal output terminal “H”: power on
40	P_CONT2	O	Power on/off control signal output terminal Not used
41	P_CONT0	O	Power on/off control signal output terminal “H”: power on
42	No Use	O	Not used
43	STT_D/P	I	DSD/PCM signal input from the servo DSP
44	STT_M2	I	Multi/2ch signal input from the servo DSP Not used
45	DMUTE	I	Audio muting signal input from the servo DSP
46	No Use	I	Not used
47	I2C_DATA	I/O	I2C Two-way data bus terminal Not used
48	I2C_CLK	I	I2C data transfer clock signal input terminal Not used
49, 50	No Use	O	Not used
51	No Use	O	Not used
52	MULTI/STEREO	O	Fixed at “L” in this set
53	XAMUTE	O	Muting on/off control signal output terminal “L”: muting on
54	No Use	O	Not used
55	XDOUT_EN	I	Digital out (CD) on/off signal input terminal “L”: Digital out (CD) on Fixed at “L” in this set
56	MULTI_PRIO	I	HDMI priority selection signal input terminal Not used
57 to 61	No Use	O	Not used
62	Vcc2	-	Power supply terminal (+3.3V)
63	No Use	O	Not used
64	Vss	-	Ground terminal

Pin No.	Pin Name	I/O	Description
65 to 73	No Use	O	Not used
74	KEY_INT	I	Wake up signal input terminal
75	LED_LAT	O	Serial data latch pulse signal output terminal Not used
76	No Use	O	Not used
77	No Use	I	I2C Two-way data bus with the clock generator Fixed at “H” in this set
78	No Use	I	I2C data transfer clock signal input/output with the clock generator Fixed at “H” in this set
79 to 82	No Use	O	Not used
83	CKSW	I	Chucking detection switch input terminal
84	OCSW	I	Disc tray open/close detection switch input terminal “L”: disc tray is closed
85	No Use	O	Not used
86	No Use	O	Not used
87	No Use	O	Not used
88	DAC_CS1	O	Chip select signal output to the D/A converter
89	LED_PLAY	O	Play LED drive signal output terminal “H”: LED on
90	LED_PAUSE	O	Pause LED drive signal output terminal “H”: LED on
91	No Use	O	Fixed at “L” in this set
92	DESTINATION	I	Setting terminal for the destination
93	MODEL	I	Setting terminal for the model
94, 95	KEY2, KEY1	I	Front panel key input terminal
96	AVss	-	Ground terminal
97	KEY0	I	Front panel key input terminal
98	Vref	I	Reference voltage (+3.3V) input terminal
99	AVcc	-	Power supply terminal (+3.3V)
100	No Use	O	Not used

MAIN BOARD IC1101 CXD9927R-B (RF AMP, SERVO DSP)

Pin No.	Pin Name	I/O	Description
1	OSN	O	RF offset cancellation capacitor connecting terminal
2	RFGC	O	RF AGC loop capacitor connecting Not used
3	IREF	I	Reference current input terminal
4	AVDD3	-	Power supply terminal (+3.3V)
5	AGND	-	Ground terminal
6	DVDA	I	AC coupled input path A
7	DVDB	I	AC coupled input path B
8	DVDC	I	AC coupled input path C
9	DVDD	I	AC coupled input path D
10	DVDRF IP	I	AC coupled super audio CD RF signal input from the optical pick-up block
11	MA	I	DC coupled main-beam RF signal input A
12	MB	I	DC coupled main-beam RF signal input B
13	MC	I	DC coupled main-beam RF signal input C
14	MD	I	DC coupled main-beam RF signal input D
15	SA	I	DC coupled sub-beam RF signal input A Not used
16	SB	I	DC coupled sub-beam RF signal input B Not used
17	TNI	I	3 beam satellite PD signal negative input from the optical pick-up block
18	TPI	I	3 beam satellite PD signal positive input from the optical pick-up block
19, 20	MDI1, MDI2	I	Laser power monitor input from the optical pick-up block
21	LDO2	O	Laser diode drive signal output to the optical pick-up block (for super audio CD)
22	LDO1	O	Laser diode drive signal output to the optical pick-up block (for CD)
23	SVDD3	-	Power supply terminal (+3.3V)
24	CSO	O	Central servo signal output terminal Not used
25	RFLVL	O	RFRP low pass output terminal Not used
26	SGND	-	Ground terminal
27	V2REFO	-	Reference voltage (+2.8V) output terminal
28	V2O	-	Reference voltage (+2V) output to the optical pick-up block
29	VREFO	O	Reference voltage (+1.4V) output terminal
30	FEO	O	Focus error monitor output terminal Not used
31	TEO	O	Tracking error monitor output terminal Not used
32	TEZISLV	O	O Slice level of tracking error signal output terminal Not used
33	OP_OUT	O	Output to the internal operational amplifier Not used
34	OP_INN	I	Negative input from the internal operational amplifier Not used
35	OP_INP	I	Positive input from the motor driver
36	DMO	O	Spindle motor control signal output to the motor driver
37	FMO	O	Sled motor control signal output to the motor driver
38	TROPENPWM	O	Loading motor control signal output terminal Not used
39	IOPMON	I	Power monitor terminal
40	TRO	O	Tracking coil control signal output to the coil driver
41	FOO	O	Focus coil control signal output to the coil driver
42	AGND18	-	Ground terminal
43	AVDD18	-	Power supply terminal (+1.8V)
44	USB_DP	I/O	Two-way data (positive) bus terminal Not used
45	USB_DM	I/O	Two-way data (negative) bus terminal Not used
46	USB_VDD3	-	Power supply terminal (+3.3V)
47	USB_VSS	-	Ground terminal
48	PAD_VRT	-	Not used
49	USB_VDD18	-	Power supply terminal (+1.8V)
50	USB_VSS	-	Ground terminal
51	DIR_ERROR/NC	I	PLL lock error signal and data error flag output terminal Fixed at “L” in this set
52	DIR_AUDIO/NC	I	PCM audio data output terminal Fixed at “L” in this set
53	LIMITSW	I	Limit detection switch input terminal
54	MSW	O	CD/super audio CD selection signal output terminal “L”: CD, “H”: super audio CD
55	DVDD18	-	Power supply terminal (+1.8V)
56 to 64	HA2 to HA8, HA18, HA19	O	Address signal output to the flash ROM
65	DVDD3	-	Power supply terminal (+3.3V)
66	XWR	O	Write enable signal output to the flash ROM
67 to 75	HA16 to HA9, HA20	O	Address signal output to the flash ROM

Pin No.	Pin Name	I/O	Description
76	XROMCS	O	Chip select signal output to the flash ROM
77	HA1	O	Address signal output to the flash ROM
78	XRD	O	Read enable signal output to the flash ROM
79, 80	HD0, HD1	I/O	Two-way data bus terminal with the flash ROM
81	DVSS	-	Ground terminal
82 to 86	HD2 to HD6	I/O	Two-way data bus terminal with the flash ROM
87	HA21	O	Address signal output to the flash ROM
88	RESERVED	-	Not used
89	HD7	I/O	Two-way data bus terminal with the flash ROM
90	DVSS	-	Ground terminal
91, 92	HA17, HA0	O	Address signal output to the flash ROM
93	DVDD18	-	Power supply terminal (+1.8V)
94	FWD	O	Loading motor drive signal output terminal Not used
95	REV	O	Loading motor drive signal output terminal Not used
96	DVDD3	-	Power supply terminal (+3.3V)
97	IFSDO	O	Serial data output to the system controller
98	IFCK	O	Serial data transfer clock signal output to the system controller
99	xIFCS	O	Chip select signal output to the system controller
100	IFSDI	I	Serial data input from the system controller
101	SCL	O	Serial data transfer clock signal output to the EEPROM
102	SDA	I/O	Two-way data bus with the EEPROM
103	CKSW	I	Chucking detection switch input terminal Fixed at “L” in this set
104	OCSW	I	Disc table open/close detection switch input terminal Fixed at “L” in this set
105	RXD	I	Receive data input terminal Not used
106	TXD	O	Transmit data output terminal Not used
107	ICE	I	ICE mode enable signal input terminal Not used
108	xSYSRST	I	Reset signal input from the system controller “L”: reset
109	RESERVED	-	Not used
110	xIFBSY	I	Busy signal input from the system controller
111	DQM0	O	Data mask signal output to the SD-RAM
112	EEWP	O	Write protect signal output to the EEPROM
113 to 117	RD7 to RD3	I/O	Two-way data bus with the SD-RAM
118	DVDD3	-	Power supply terminal (+3.3V)
119 to 129	RD2 to RD0, RD15 to RD8	I/O	Two-way data bus with the SD-RAM
130	TSD_M	O	Thermal shut down signal output to the motor/coil driver
131	DVDD3	-	Power supply terminal (+3.3V)
132	DQM1	O	Data mask signal output to the SD-RAM
133	_RWE	O	Write enable signal output to the SD-RAM
134	_CAS	O	Column address strobe signal output to the SD-RAM
135	_RAS	O	Row address strobe signal output to the SD-RAM
136	_RCS	O	Chip select signal output to the SD-RAM
137, 138	BA0, BA1	O	Bank address signal output to the SD-RAM
139 to 141	RA10, RA0, RA1	O	Address signal output to the SD-RAM
142	DVDD18	-	Power supply terminal (+1.8V)
143, 144	RA2, RA3	O	Address signal output to the SD-RAM
145	DVDD3	-	Power supply terminal (+3.3V)
146	DRCLK	O	Serial data transfer clock signal output to the SD-RAM
147	CKE	O	Clock enable signal output to the SD-RAM
148	DVSS	-	Ground terminal
149 to 155	RA11, RA9 to RA4	O	Address signal output to the SD-RAM
156	DVDD3	-	Power supply terminal (+3.3V)
157	MUTE123	O	Muting signal output to the motor/coil driver
158	MUTE	O	Muting signal output to the motor/coil driver
159	DDC_DA	O	Serial data transfer clock signal output terminal
160	DVDD18	-	Power supply terminal (+1.8V)
161	DDC_CLK	I/O	Two-way data bus with terminal
162	HTPLG	I	HDMI hot-plug detection signal input terminal
163	AGND3	-	Ground terminal
164	EXT_RES	-	Fixed at “L” in this set

Pin No.	Pin Name	I/O	Description
165, 166	AVDD3	-	Power supply terminal (+3.3V)
167	EXT_CAP	-	Not used
168, 169	AGND3, AGND18	-	Ground terminal
170	TXCN	O	TMDS clock signal (negative) output to the HDMI OUT connector Not used
171	TXCP	O	TMDS clock signal (positive) output to the HDMI OUT connector Not used
172	AVDD18	-	Power supply terminal (+1.8V)
173	TX0N	O	TMDS data (negative) output to the HDMI OUT connector Not used
174	TX0P	O	TMDS data (positive) output to the HDMI OUT connector Not used
175	AGND18	-	Ground terminal
176	TX1N	O	TMDS data (negative) output to the HDMI OUT connector Not used
177	TX1P	O	TMDS data (positive) output to the HDMI OUT connector Not used
178	AVDD18	-	Power supply terminal (+1.8V)
179	TX2N	O	TMDS data (negative) output to the HDMI OUT connector Not used
180	TX2P	O	TMDS data (positive) output to the HDMI OUT connector Not used
181	AGND18	-	Ground terminal
182, 183	R/Cr/Pr, B/Cb/Pb	O	Component video signal output terminal Not used
184	DACVSSA	-	Ground terminal
185	Y/G	O	Component video signal output terminal Not used
186	DACVDDA	-	Power supply terminal (+3.3V)
187	CVBS	O	Video signal output terminal (for TEST MODE)
188	DACVSSB	-	Ground terminal
189	C	O	Chroma signal output terminal Not used
190	DACVDDB	-	Power supply terminal (+3.3V)
191	Y	O	Y signal output terminal Not used
192	DACVSSC	-	Ground terminal
193	FS	-	Full scale adjustment terminal Fixed at “L” in this set
194	VREF	-	For reference voltage terminal
195	DACVDDC	-	Power supply terminal (+3.3V)
196	VBUS_OE	O	VBUS control signal output terminal Not used
197	VBUS_OC	I	VBUS control signal input terminal Fixed at “H” in this set
198	SCORE/DIR_XSTATE	I	Source clock switching monitor input terminal Not used
199	SPMCK	O	Master clock signal output terminal Not used
200	SPBCK	O	Bit clock signal output terminal Not used
201	SPLRCK	O	L/R sampling clock signal output terminal Not used
202	ADIN(SPDATA)	I	Audio serial data input terminal Not used
203	ACLK	O	Master clock signal output terminal Not used
204	ABCK	O	Bit clock signal output to the D/A converter
205	ALRCK	O	L/R sampling clock signal output to the D/A converter
206	MC_DATA(ADIN)	I	Audio serial data input terminal Not used
207	DVDD3	-	Power supply terminal (+3.3V)
208	NO_USE	O	Fixed at “L” in this set
209	WIDE	O	Normal/squeeze selection signal output terminal
210	RGB_SEL/DSEL	O	Audio muting signal output to the system controller
211	TRG_SW	O	Trigger detection switch output terminal
212	DVDD18	-	Power supply terminal (+1.8V)
213	KMOD	O	Karaoke mode status signal output terminal
214	XVOICE/DIR_CSFCAG	I	Detection of MIC signal input terminal Not used
215	SPDIF	O	SPDIF digital audio signal output to the D/A converter
216	APLLVDD3	-	Power supply terminal (+3.3V)
217	APLLCAP	-	Connection terminal for an external capacitor
218 to 220	APLLVSS, ADACVSS2, ADACVSS1	-	Ground terminal
221	DIR_CE	-	Not used
222	ASDATA3	O	Audio serial data output to the D/A converter
223	ASDATA2	O	Audio serial data output terminal Not used
224	AVCM	-	Not used
225	ASDATA1	O	Audio serial data output terminal Not used
226	ASDATA0	O	Audio serial data output terminal
227	DIR_CL	-	Not used

Pin No.	Pin Name	I/O	Description
228, 229	ADACVDD1, ADACVDD2	-	Power supply terminal (+3.3V)
230	Rt/DIR_DI	I	Serial data input terminal Fixed at “L” in this set
231	Lt/DIR_DO	O	Serial data output terminal Not used
232	ADACVSS3	-	Ground terminal
233	ADACVDD3	-	Power supply terminal (+3.3V)
234	SADCVDD18	-	Power supply terminal (+1.8V)
235	SADCVSS18	-	Ground terminal
236	RFGND18	-	Ground terminal
237	RFVDD18	-	Power supply terminal (+1.8V)
238	XTALO	O	System clock output terminal Not used
239	XTALI	I	System clock input terminal
240	JITFO	O	Output terminal of the RF jitter meter
241	JITFN	I	Input terminal of the RF jitter meter
242	PLLVSS	-	Ground terminal
243	PLLVDD3	-	Power supply terminal (+3.3V)
244	LPFON	O	Data PLL loop filter output terminal
245	LPFIP	I	Data PLL loop filter input terminal
246	LPFIN	I	Data PLL loop filter input terminal
247	LPFOP	O	Data PLL loop filter output terminal
248	ADCVDD3	-	Power supply terminal (+3.3V)
249	ADCVSS	-	Ground terminal
250	RFVDD3	-	Power supply terminal (+3.3V)
251	RFRPDC	O	RF ripple detect output terminal
252	RFRPAC	I	RF ripple detect input terminal
253	HRFZC	I	High frequency RF ripple zero crossing terminal
254	CRTPLP	O	Defect level filter capacitor connecting terminal
255	RFGND18	-	Ground terminal
256	OSP	O	RF offset cancellation capacitor connecting terminal

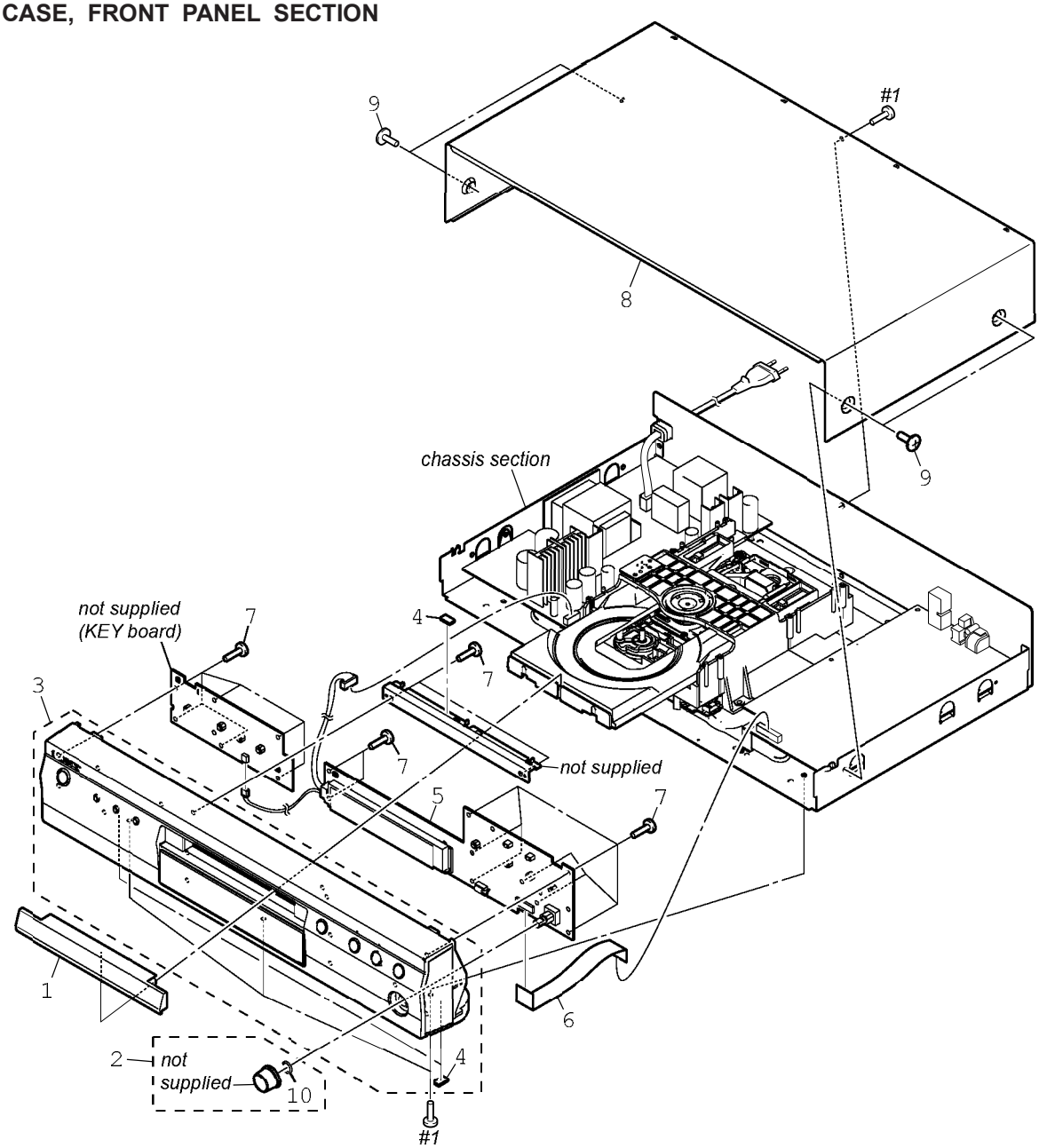
SECTION 5
EXPLODED VIEWS

Note:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

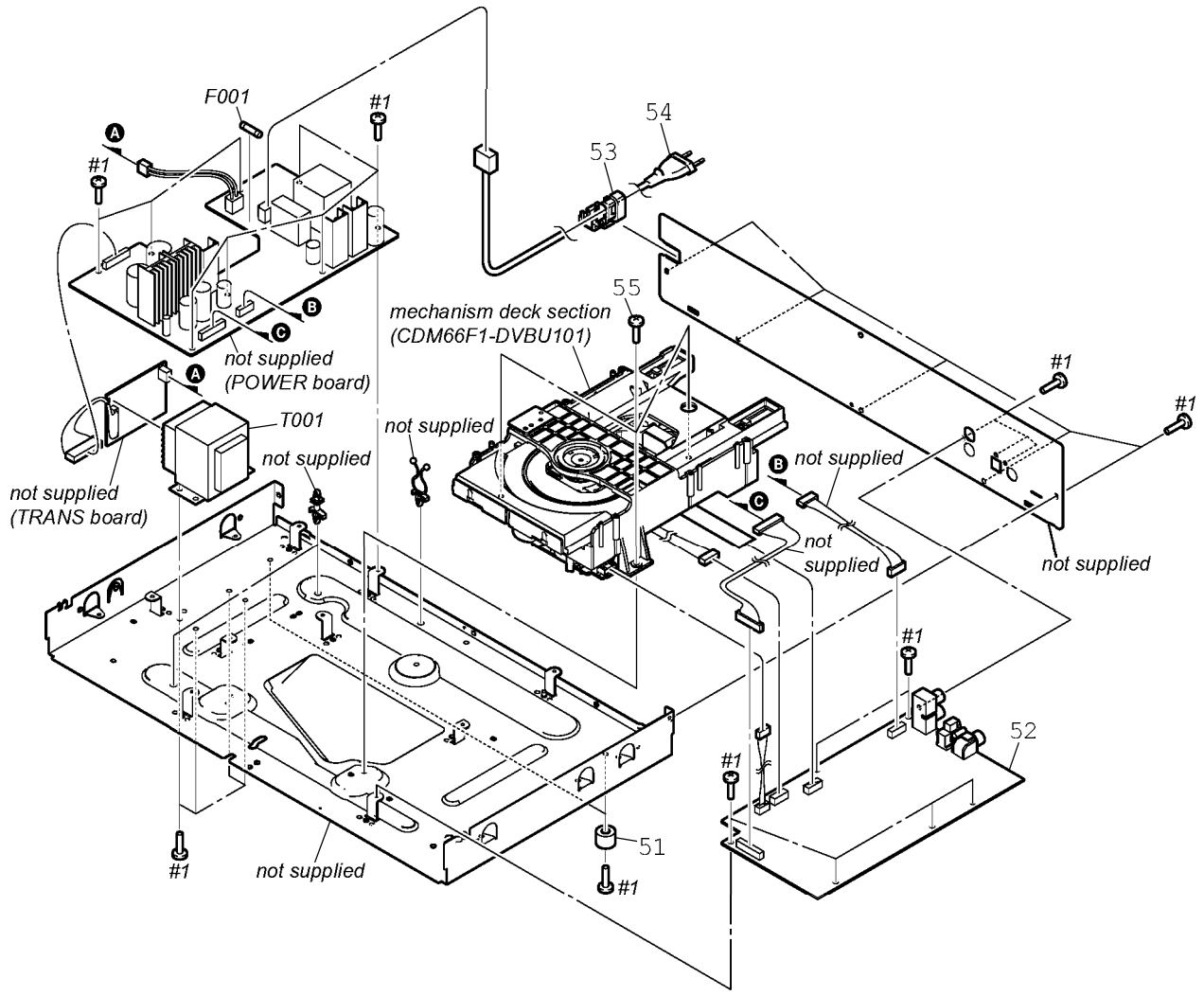
5-1. CASE, FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
1	4-184-735-01	PANEL (LOADING)	
2	A-1776-972-A	KNOB (AMS) ASSY	
3	X-2548-096-1	PANEL (FRONT) ASSY	
4	4-977-358-01	CUSHION	
5	A-1775-568-A	DISPLAY BOARD, COMPLETE	
6	1-828-338-11	WIRE (FLAT TYPE) (15 CORE)	

Ref. No.	Part No.	Description	Remark
7	3-087-053-01	+BVTP2.6 (3CR)	
8	4-232-149-32	CASE (408226)	
9	3-363-099-02	SCREW (CASE 3 TP2)	
10	3-354-981-11	SPRING (SUS), RING	
#1	7-685-646-71	SCREW +BVTP 3X8 TYPE2 IT-3	

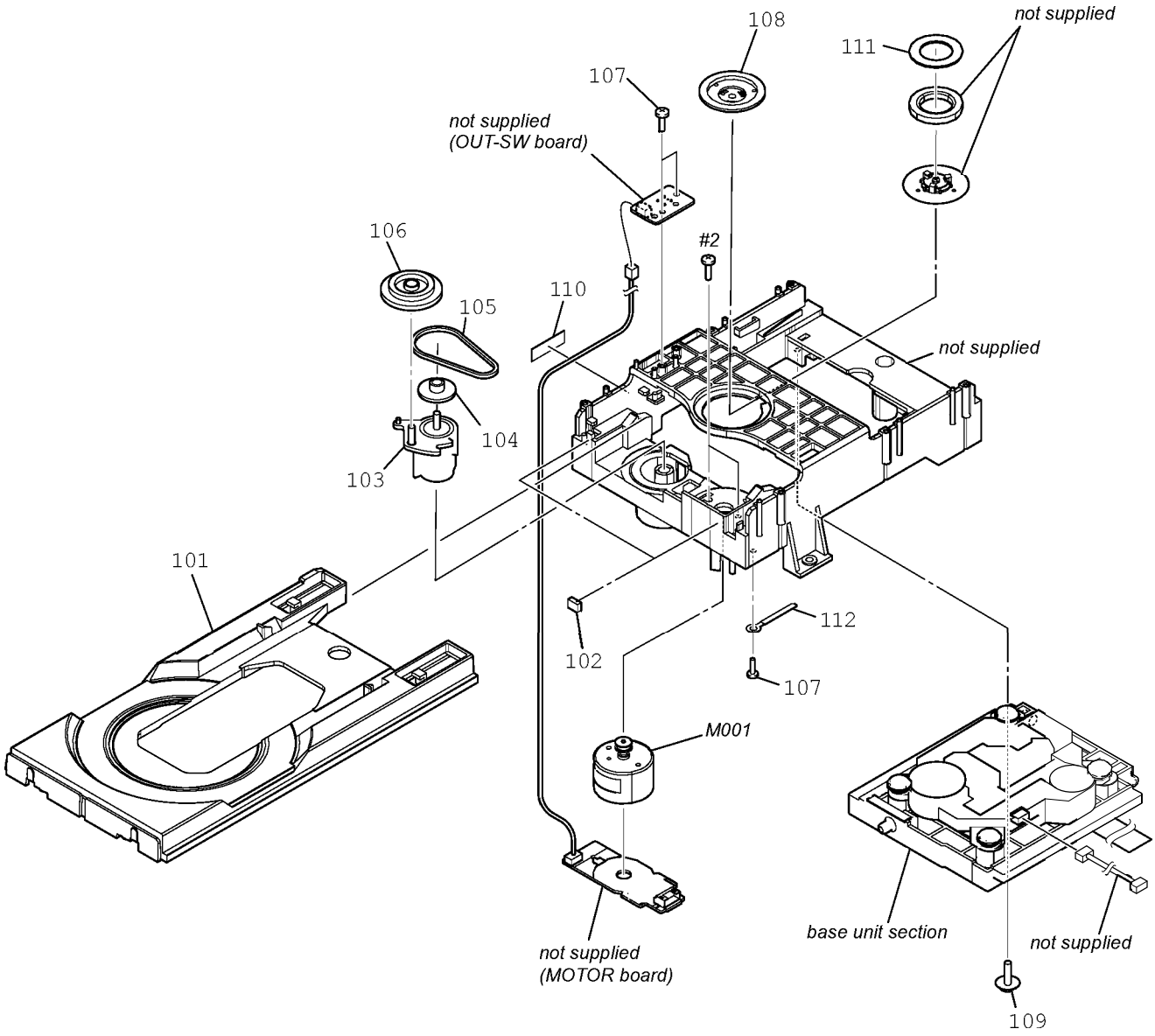
5-2. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark
51	X-2022-049-1	FOOT ASSY	
52	A-1775-565-A	MAIN BOARD, COMPLETE	
⚠ 53	3-113-062-01	CORD BUSH (2104)	
⚠ 54	1-834-966-41	POWER-SUPPLY CORD (AEP)	
⚠ 54	1-837-309-21	CORD, POWER-SUPPLY (UK)	

Ref. No.	Part No.	Description	Remark
55	3-077-331-01	+BV3 (3-CR)	
⚠ F001	1-532-499-33	FUSE (T400mAL/250V)	
⚠ T001	1-445-874-11	POWER TRANSFORMER	
#1	7-685-646-71	SCREW +BVTP 3X8 TYPE2 IT-3	

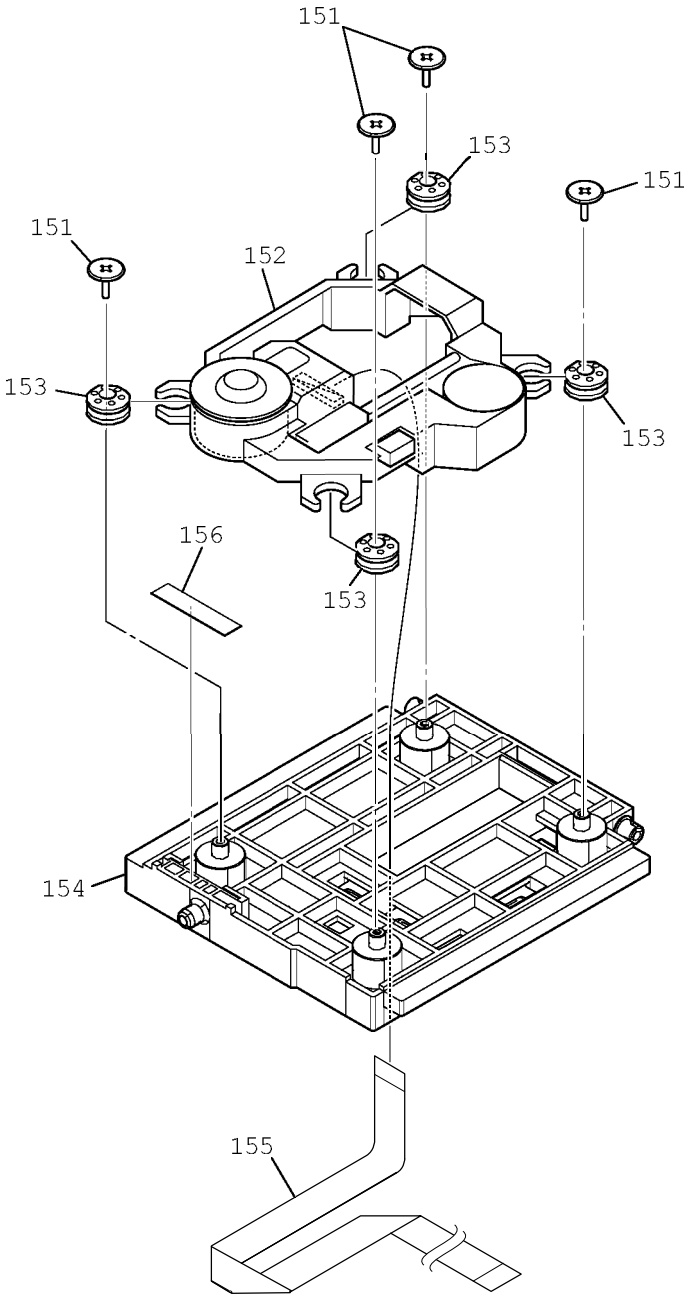
5-3. MECHANISM DECK SECTION (CDM66F1-DVBU101)



Ref. No.	Part No.	Description	Remark
101	3-452-881-01	TRAY (66F)	
102	4-232-682-01	CUSHION (66)	
103	4-232-712-01	CAM (66)	
104	4-232-710-01	PULLEY (LD)	
105	4-232-713-01	BELT (LD)	
106	4-232-711-01	GEAR (LD)	
107	3-087-053-01	+BVTP2.6 (3CR)	

Ref. No.	Part No.	Description	Remark
108	3-452-884-01	HOLDER (YOKE)	
109	4-227-899-31	SCREW (DIA. 12), FROATING	
110	4-860-518-00	CUSHION	
111	3-452-883-01	YOKE	
112	4-237-065-01	CLAMP (L35)	
M001	A-4604-363-A	MOTOR (L) ASSY (LOADING)	
#2	7-621-775-10	SCREW +B 2.6X4	

5-4. BASE UNIT SECTION



Ref. No.	Part No.	Description	Remark
151	3-087-599-01	INSULATOR SCREW	
⚠ 152	8-820-322-04	OPTICAL PICK-UP BLOCK (KHM-313CAB/C2RP)	
153	2-634-618-11	INSULATOR	
154	3-452-882-01	HOLDER (66F)	
155	1-838-107-51	WIRE, FLAT TYPE (24 CORE)	
156	4-113-450-01	CUSHION (66F)	

DISPLAY | KEY | MAIN

SECTION 6
ELECTRICAL PARTS LIST

Note:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . , uPA. . , µPA. . ,
  uPB. . : µPB. . , uPC. . , µPC. . ,
  uPD. . : µPD. .

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
	A-1775-568-A	DISPLAY BOARD, COMPLETE			
		**********			
*	4-945-292-01	HOLDER, INDICATION TUBE			
	4-949-935-41	CUSHION (FL)			
		< CAPACITOR >			
C803	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C804	1-126-157-11	ELECT	10uF	20%	16V
C806	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C807	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C808	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C809	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C810	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C811	1-126-157-11	ELECT	10uF	20%	16V
C812	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C813	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C814	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C815	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C816	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C817	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C818	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
		< CONNECTOR >			
CN803	1-779-552-21	CONNECTOR, FFC (LIF (NON-ZIF)) 15P			
		< DIODE >			
D801	6-502-961-01	DIODE DA2J10100L			
D802	8-719-046-41	LED SEL5521C-TP15 (▶)			
D803	8-719-046-39	LED SEL5821A-TP15 (❚❚)			
		< IC >			
IC801	6-600-767-01	IC PNA4823M02S0			
IC802	6-705-899-01	IC ML9208-03MBZ03B			
IC803	6-702-302-01	IC TK11133CSCL-G			
		< FLUORESCENT INDICATOR TUBE >			
ND801	1-483-035-11	INDICATOR TUBE, FLUORESCENT			
		< TRANSISTOR >			
Q802	8-729-038-23	TRANSISTOR	RT1N141C-TP-1		
Q803	8-729-038-23	TRANSISTOR	RT1N141C-TP-1		
Q804	8-729-038-23	TRANSISTOR	RT1N141C-TP-1		
		< RESISTOR >			
R804	1-216-805-11	METAL CHIP	47	5%	1/10W
R807	1-216-809-11	METAL CHIP	100	5%	1/10W
R808	1-216-809-11	METAL CHIP	100	5%	1/10W
R809	1-216-809-11	METAL CHIP	100	5%	1/10W
R810	1-216-821-11	METAL CHIP	1K	5%	1/10W
R811	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R812	1-216-845-11	METAL CHIP	100K	5%	1/10W
R813	1-216-821-11	METAL CHIP	1K	5%	1/10W
R814	1-216-821-11	METAL CHIP	1K	5%	1/10W
R815	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R816	1-216-815-11	METAL CHIP	330	5%	1/10W
R817	1-216-817-11	METAL CHIP	470	5%	1/10W
		< ROTARY ENCODER >			
S806	1-477-995-11	ENCODER, ROTARY (|◀◀ AMS ▶▶| PUSH ENTER)			
		< SWITCH >			
S807	1-771-410-21	SWITCH, TACTILE (⏏)			
S808	1-771-410-21	SWITCH, TACTILE (▶)			
S809	1-771-410-21	SWITCH, TACTILE (❚❚)			
S810	1-771-410-21	SWITCH, TACTILE (■)			
**********					
		KEY BOARD			
		*********			
		< CONNECTOR >			
CN809	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P			
		< RESISTOR >			
R801	1-216-821-11	METAL CHIP	1K	5%	1/10W
R802	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R803	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
		< SWITCH >			
S801	1-771-410-21	SWITCH, TACTILE (I/⏻)			
S802	1-771-410-21	SWITCH, TACTILE (SA-CD/CD)			
S803	1-771-410-21	SWITCH, TACTILE (TIME/TEXT			
S804	1-771-410-21	SWITCH, TACTILE (DISPLAY MODE)			
**********					
	A-1775-565-A	MAIN BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C201	1-115-156-11	CERAMIC CHIP	1uF		10V

Ref. No.	Part No.	Description			Remark
C202	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C203	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C204	1-114-263-91	ELECT	47uF	20%	25V
C206	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C207	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C208	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C251	1-115-156-11	CERAMIC CHIP	1uF		10V
C252	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C253	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C254	1-114-263-91	ELECT	47uF	20%	25V
C256	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C281	1-112-089-11	ELECT	47uF	20%	25V
C282	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C283	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C284	1-112-089-11	ELECT	47uF	20%	25V
C285	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C286	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C287	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C288	1-112-089-11	ELECT	47uF	20%	25V
C289	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C290	1-112-089-11	ELECT	47uF	20%	25V
C291	1-112-100-11	ELECT	10uF	20%	50V
C292	1-115-156-11	CERAMIC CHIP	1uF		10V
C293	1-115-156-11	CERAMIC CHIP	1uF		10V
C294	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C295	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C296	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C297	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C501	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C502	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C503	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C507	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C508	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C510	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C515	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C517	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C518	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C520	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C521	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C522	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C523	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C526	1-104-658-91	ELECT	100uF	20%	10V
C527	1-104-658-91	ELECT	100uF	20%	10V
C528	1-126-916-11	ELECT	1000uF	20%	6.3V
C529	1-104-658-91	ELECT	100uF	20%	10V
C531	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C538	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C577	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C578	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C579	1-126-933-11	ELECT	100uF	20%	16V
C580	1-126-933-11	ELECT	100uF	20%	16V
C591	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C592	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C593	1-104-658-91	ELECT	100uF	20%	10V
C594	1-104-658-91	ELECT	100uF	20%	10V
C1101	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1103	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1105	1-126-947-11	ELECT	47uF	20%	35V
C1106	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1108	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

Ref. No.	Part No.	Description			Remark
C1110	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C1111	1-104-658-91	ELECT	100uF	20%	10V
C1112	1-126-947-11	ELECT	47uF	20%	35V
C1113	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1114	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1115	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1116	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1117	1-126-947-11	ELECT	47uF	20%	35V
C1118	1-126-947-11	ELECT	47uF	20%	35V
C1119	1-126-947-11	ELECT	47uF	20%	35V
C1120	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C1121	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C1122	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C1123	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C1124	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C1125	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1126	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1127	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1129	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C1130	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1132	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1133	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1135	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C1136	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1137	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1138	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C1139	1-162-919-11	CERAMIC CHIP	22PF	5%	50V
C1140	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1144	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1145	1-126-964-11	ELECT	10uF	20%	50V
C1146	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1147	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C1148	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C1149	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1151	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C1154	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1155	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1156	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1158	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1159	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1160	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1161	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1162	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1163	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1164	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1165	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1169	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1170	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C1171	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1172	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1174	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1175	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1176	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1177	1-126-925-91	ELECT	470uF	20%	10V
C1179	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1180	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1181	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1182	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C1183	1-128-934-11	CERAMIC CHIP	0.33uF	20%	10V
C1184	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

MAIN

Ref. No.	Part No.	Description			Remark
C1186	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C1187	1-104-658-91	ELECT	100uF	20%	10V
C1190	1-104-658-91	ELECT	100uF	20%	10V
C1191	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1192	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1193	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C1195	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C1197	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1198	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C1199	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C1203	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1205	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C1206	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C1208	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1209	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C1210	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1211	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C1212	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1213	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1214	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C1215	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1217	1-126-947-11	ELECT	47uF	20%	35V
C1218	1-126-964-11	ELECT	10uF	20%	50V
C1219	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1220	1-126-964-11	ELECT	10uF	20%	50V
C1221	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1222	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1223	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1224	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1225	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C1226	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C1233	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C1234	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C1235	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C1236	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C1703	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1705	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1706	1-104-658-91	ELECT	100uF	20%	10V
C1713	1-104-658-91	ELECT	100uF	20%	10V
C1714	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C1715	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C1716	1-126-960-11	ELECT	1uF	20%	50V
C1801	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C1802	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C1900	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C1901	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C1903	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1904	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1905	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C1906	1-112-083-11	ELECT	100uF	20%	16V
C2100	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C2108	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
C2109	1-104-658-91	ELECT	100uF	20%	10V
C2110	1-104-658-91	ELECT	100uF	20%	10V
C2114	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2115	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C2116	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2117	1-165-989-11	CERAMIC CHIP	10uF	10%	6.3V
C2118	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C2119	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V

Ref. No.	Part No.	Description			Remark
C2130	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C2502	1-164-172-11	CERAMIC CHIP	0.0056uF	10%	25V
C2503	1-127-760-11	CERAMIC CHIP	4.7uF	10%	6.3V
		< CONNECTOR >			
CN201	1-691-766-11	PLUG (MICRO CONNECTOR) 4P			
CN502	1-820-115-51	CONNECTOR, FFC/FPC 15P			
CN504	1-817-199-51	CONNECTOR, FFC/FPC 9P			
CN514	1-691-770-11	PLUG (MICRO CONNECTOR) 8P			
CN1101	1-815-763-32	CONNECTOR, FFC/FPC 24P			
CN1105	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P			
CN1201	1-779-977-11	PIN, CONNECTOR 6P			
CN1801	1-779-978-11	PIN, CONNECTOR 3P			
		< DIODE >			
D501	6-502-961-01	DIODE DA2J10100L			
D502	6-500-334-01	DIODE MC2836-T112-1			
D503	6-502-961-01	DIODE DA2J10100L			
D505	6-500-334-01	DIODE MC2836-T112-1			
D1801	6-502-961-01	DIODE DA2J10100L			
		< GROUND TERMINAL >			
EB501	1-537-770-21	TERMINAL BOARD, GROUND			
EB502	1-537-770-21	TERMINAL BOARD, GROUND			
EB503	1-537-770-21	TERMINAL BOARD, GROUND			
EB504	1-537-770-21	TERMINAL BOARD, GROUND			
EB505	1-537-770-21	TERMINAL BOARD, GROUND			
EB506	1-537-770-21	TERMINAL BOARD, GROUND			
		< FERRITE BEAD/JUMPER RESISTOR >			
FB508	1-469-324-21	FERRITE, EMI (SMD) (2012)			
FB510	1-469-324-21	FERRITE, EMI (SMD) (2012)			
FB1106	1-469-324-21	FERRITE, EMI (SMD) (2012)			
FB1107	1-469-324-21	FERRITE, EMI (SMD) (2012)			
FB1108	1-469-324-21	FERRITE, EMI (SMD) (2012)			
FB1109	1-469-324-21	FERRITE, EMI (SMD) (2012)			
FB1111	1-469-670-21	FERRITE, EMI (SMD) (2012)			
FB1112	1-469-670-21	FERRITE, EMI (SMD) (2012)			
FB1113	1-469-670-21	FERRITE, EMI (SMD) (2012)			
FB1115	1-469-670-21	FERRITE, EMI (SMD) (2012)			
FB1116	1-469-670-21	FERRITE, EMI (SMD) (2012)			
FB1117	1-469-670-21	FERRITE, EMI (SMD) (2012)			
FB1118	1-469-670-21	FERRITE, EMI (SMD) (2012)			
FB1201	1-469-152-11	FERRITE, EMI (SMD) (2012)			
FB1701	1-469-670-21	FERRITE, EMI (SMD) (2012)			
FB1900	1-469-670-21	FERRITE, EMI (SMD) (2012)			
FB1903	1-216-295-91	SHORT CHIP 0			
FB1904	1-216-295-91	SHORT CHIP 0			
FB2101	1-469-324-21	FERRITE, EMI (SMD) (2012)			
FB2103	1-469-324-21	FERRITE, EMI (SMD) (2012)			
		< IC >			
IC201	6-703-420-01	IC DSD1751DBQR			
IC202	8-759-710-97	IC NJM4565M-D			
IC203	6-705-337-01	IC TK11150CSCL-G			
IC204	6-702-302-01	IC TK11133CSCL-G			
IC501	A-1787-646-A	IC R5F364A6DFA (for SERVICE)			
IC503	6-715-382-01	IC PST8435UL			
IC504	6-712-613-01	IC SI-3010KM-TLS			
IC506	6-712-613-01	IC SI-3010KM-TLS			
IC1101	6-714-722-01	IC CXD9927R-B			

Ref. No.	Part No.	Description			Remark
IC1102	6-715-450-01	IC MX29LV320DBTI-70-SCD-0803			
IC1103	6-714-152-01	IC R1EX24064ASAS0A			
IC1104	6-714-642-01	IC EM638165 TSA-6G			
IC1105	6-702-302-01	IC TK11133CSCL-G			
IC1107	6-702-302-01	IC TK11133CSCL-G			
IC1110	6-707-739-01	IC MM1661JTRE			
IC1201	6-704-524-01	IC FAN8036L			
IC1202	6-705-337-01	IC TK11150CSCL-G			
IC1701	6-600-461-01	IC TOTX147L (B) (DIGITAL (CD) OUT OPTICAL)			
IC1703	8-759-058-62	IC TC7S08FU (TE85R)			
IC1901	6-700-596-01	IC TC74LVX4053FT (EL)			
IC1902	6-701-877-01	IC SM8707EV-G-E2			
		< JACK >			
J201	1-821-674-11	JACK, PIN 2P (ANALOG OUT L/R)			
J1701	1-794-972-11	JACK, PIN 1P (DIGITAL (CD) OUT COAXIAL)			
		< COIL >			
L1701	1-412-056-11	INDUCTOR	4.7uH		
L1801	1-410-997-42	INDUCTOR	2.2uH		
		< TRANSISTOR >			
Q201	8-729-141-73	TRANSISTOR	2SC3624A-T1L15L16		
Q202	8-729-141-73	TRANSISTOR	2SC3624A-T1L15L16		
Q251	8-729-141-73	TRANSISTOR	2SC3624A-T1L15L16		
Q252	8-729-141-73	TRANSISTOR	2SC3624A-T1L15L16		
Q281	8-729-038-11	TRANSISTOR	RT1P140C-TP-1		
Q282	8-729-038-11	TRANSISTOR	RT1P140C-TP-1		
Q283	8-729-027-31	TRANSISTOR	DTA124EKA-T146		
Q503	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF		
Q1101	6-550-008-01	TRANSISTOR	UM6K1N-TN		
Q1102	6-550-653-01	TRANSISTOR	QST8TR		
Q1103	8-729-027-52	TRANSISTOR	DTC124EKA-T146		
Q1701	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
		< RESISTOR >			
R201	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R202	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R203	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R204	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R205	1-216-815-11	METAL CHIP	330	5%	1/10W
R206	1-216-813-11	METAL CHIP	220	5%	1/10W
R207	1-216-809-11	METAL CHIP	100	5%	1/10W
R208	1-216-845-11	METAL CHIP	100K	5%	1/10W
R209	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R251	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R252	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R253	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R254	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R255	1-216-815-11	METAL CHIP	330	5%	1/10W
R256	1-216-813-11	METAL CHIP	220	5%	1/10W
R257	1-216-809-11	METAL CHIP	100	5%	1/10W
R258	1-216-845-11	METAL CHIP	100K	5%	1/10W
R259	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R281	1-218-725-11	METAL CHIP	24K	0.5%	1/10W
R282	1-216-833-11	METAL CHIP	10K	5%	1/10W
R283	1-216-849-11	METAL CHIP	220K	5%	1/10W
R284	1-216-841-11	METAL CHIP	47K	5%	1/10W
R285	1-216-841-11	METAL CHIP	47K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R286	1-216-809-11	METAL CHIP	100	5%	1/10W
R287	1-216-809-11	METAL CHIP	100	5%	1/10W
R288	1-216-809-11	METAL CHIP	100	5%	1/10W
R289	1-216-801-11	METAL CHIP	22	5%	1/10W
R290	1-216-801-11	METAL CHIP	22	5%	1/10W
R291	1-216-801-11	METAL CHIP	22	5%	1/10W
R292	1-216-801-11	METAL CHIP	22	5%	1/10W
R293	1-216-801-11	METAL CHIP	22	5%	1/10W
R294	1-216-801-11	METAL CHIP	22	5%	1/10W
R295	1-216-801-11	METAL CHIP	22	5%	1/10W
R501	1-216-857-11	METAL CHIP	1M	5%	1/10W
R504	1-216-833-11	METAL CHIP	10K	5%	1/10W
R506	1-216-833-11	METAL CHIP	10K	5%	1/10W
R508	1-216-833-11	METAL CHIP	10K	5%	1/10W
R509	1-216-809-11	METAL CHIP	100	5%	1/10W
R510	1-216-833-11	METAL CHIP	10K	5%	1/10W
R511	1-216-821-11	METAL CHIP	1K	5%	1/10W
R512	1-216-833-11	METAL CHIP	10K	5%	1/10W
R513	1-216-821-11	METAL CHIP	1K	5%	1/10W
R514	1-216-833-11	METAL CHIP	10K	5%	1/10W
R515	1-216-833-11	METAL CHIP	10K	5%	1/10W
R516	1-216-833-11	METAL CHIP	10K	5%	1/10W
R517	1-216-833-11	METAL CHIP	10K	5%	1/10W
R518	1-216-833-11	METAL CHIP	10K	5%	1/10W
R519	1-216-833-11	METAL CHIP	10K	5%	1/10W
R520	1-216-833-11	METAL CHIP	10K	5%	1/10W
R521	1-216-833-11	METAL CHIP	10K	5%	1/10W
R522	1-216-833-11	METAL CHIP	10K	5%	1/10W
R523	1-216-833-11	METAL CHIP	10K	5%	1/10W
R524	1-216-833-11	METAL CHIP	10K	5%	1/10W
R525	1-216-833-11	METAL CHIP	10K	5%	1/10W
R526	1-216-809-11	METAL CHIP	100	5%	1/10W
R527	1-216-833-11	METAL CHIP	10K	5%	1/10W
R528	1-216-833-11	METAL CHIP	10K	5%	1/10W
R529	1-216-821-11	METAL CHIP	1K	5%	1/10W
R530	1-216-809-11	METAL CHIP	100	5%	1/10W
R531	1-216-833-11	METAL CHIP	10K	5%	1/10W
R532	1-216-821-11	METAL CHIP	1K	5%	1/10W
R533	1-216-809-11	METAL CHIP	100	5%	1/10W
R534	1-216-833-11	METAL CHIP	10K	5%	1/10W
R535	1-216-809-11	METAL CHIP	100	5%	1/10W
R536	1-216-864-11	SHORT CHIP	0		
R538	1-216-857-11	METAL CHIP	1M	5%	1/10W
R539	1-216-833-11	METAL CHIP	10K	5%	1/10W
R542	1-216-833-11	METAL CHIP	10K	5%	1/10W
R543	1-216-833-11	METAL CHIP	10K	5%	1/10W
R544	1-216-833-11	METAL CHIP	10K	5%	1/10W
R545	1-216-833-11	METAL CHIP	10K	5%	1/10W
R546	1-216-833-11	METAL CHIP	10K	5%	1/10W
R551	1-216-809-11	METAL CHIP	100	5%	1/10W
R556	1-216-841-11	METAL CHIP	47K	5%	1/10W
R557	1-216-841-11	METAL CHIP	47K	5%	1/10W
R558	1-216-833-11	METAL CHIP	10K	5%	1/10W
R559	1-216-833-11	METAL CHIP	10K	5%	1/10W
R560	1-216-841-11	METAL CHIP	47K	5%	1/10W
R561	1-216-845-11	METAL CHIP	100K	5%	1/10W
R562	1-216-841-11	METAL CHIP	47K	5%	1/10W
R563	1-216-833-11	METAL CHIP	10K	5%	1/10W
R564	1-216-809-11	METAL CHIP	100	5%	1/10W
R565	1-216-809-11	METAL CHIP	100	5%	1/10W

MAIN

Ref. No.	Part No.	Description			Remark
R566	1-216-809-11	METAL CHIP	100	5%	1/10W
R567	1-216-809-11	METAL CHIP	100	5%	1/10W
R568	1-216-809-11	METAL CHIP	100	5%	1/10W
R569	1-216-809-11	METAL CHIP	100	5%	1/10W
R570	1-216-841-11	METAL CHIP	47K	5%	1/10W
R575	1-216-864-11	SHORT CHIP	0		
R580	1-216-809-11	METAL CHIP	100	5%	1/10W
R581	1-216-809-11	METAL CHIP	100	5%	1/10W
R582	1-216-833-11	METAL CHIP	10K	5%	1/10W
R583	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R584	1-218-873-11	METAL CHIP	12K	0.5%	1/10W
R585	1-218-891-11	METAL CHIP	68K	0.5%	1/10W
R586	1-216-821-11	METAL CHIP	1K	5%	1/10W
R596	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R597	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R598	1-218-851-11	METAL CHIP	1.5K	0.5%	1/10W
R599	1-216-821-11	METAL CHIP	1K	5%	1/10W
R601	1-216-809-11	METAL CHIP	100	5%	1/10W
R602	1-216-809-11	METAL CHIP	100	5%	1/10W
R650	1-216-809-11	METAL CHIP	100	5%	1/10W
R1101	1-216-809-11	METAL CHIP	100	5%	1/10W
R1102	1-216-864-11	SHORT CHIP	0		
R1103	1-218-864-11	METAL CHIP	5.1K	0.5%	1/10W
R1105	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1106	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1107	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1108	1-216-857-11	METAL CHIP	1M	5%	1/10W
R1109	1-216-864-11	SHORT CHIP	0		
R1110	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1111	1-216-809-11	METAL CHIP	100	5%	1/10W
R1112	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R1113	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R1114	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1115	1-211-977-11	METAL CHIP	22	0.5%	1/10W
R1116	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1117	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1118	1-216-801-11	METAL CHIP	22	5%	1/10W
R1120	1-216-801-11	METAL CHIP	22	5%	1/10W
R1121	1-216-801-11	METAL CHIP	22	5%	1/10W
R1123	1-216-864-11	SHORT CHIP	0		
R1124	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1125	1-216-805-11	METAL CHIP	47	5%	1/10W
R1126	1-216-805-11	METAL CHIP	47	5%	1/10W
R1132	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1133	1-216-864-11	SHORT CHIP	0		
R1135	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1136	1-216-835-11	METAL CHIP	15K	5%	1/10W
R1137	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1138	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1139	1-216-864-11	SHORT CHIP	0		
R1140	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1141	1-216-855-11	METAL CHIP	680K	5%	1/10W
R1143	1-216-805-11	METAL CHIP	47	5%	1/10W
R1145	1-216-864-11	SHORT CHIP	0		
R1146	1-216-805-11	METAL CHIP	47	5%	1/10W
R1147	1-216-864-11	SHORT CHIP	0		
R1148	1-216-864-11	SHORT CHIP	0		
R1151	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1152	1-216-864-11	SHORT CHIP	0		
R1153	1-216-864-11	SHORT CHIP	0		
R1154	1-216-864-11	SHORT CHIP	0		
R1155	1-216-864-11	SHORT CHIP	0		
R1156	1-216-809-11	METAL CHIP	100	5%	1/10W
R1159	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1160	1-216-805-11	METAL CHIP	47	5%	1/10W
R1161	1-216-805-11	METAL CHIP	47	5%	1/10W
R1162	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1163	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1175	1-216-864-11	SHORT CHIP	0		
R1185	1-216-805-11	METAL CHIP	47	5%	1/10W
R1186	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1191	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1193	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1198	1-216-809-11	METAL CHIP	100	5%	1/10W
R1204	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R1205	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1206	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1207	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R1208	1-216-839-11	METAL CHIP	33K	5%	1/10W
R1209	1-216-839-11	METAL CHIP	33K	5%	1/10W
R1210	1-216-841-11	METAL CHIP	47K	5%	1/10W
R1212	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1213	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R1214	1-216-835-11	METAL CHIP	15K	5%	1/10W
R1215	1-216-834-11	METAL CHIP	12K	5%	1/10W
R1216	1-216-834-11	METAL CHIP	12K	5%	1/10W
R1219	1-216-838-11	METAL CHIP	27K	5%	1/10W
R1220	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1221	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R1223	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R1224	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1225	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R1226	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R1229	1-216-834-11	METAL CHIP	12K	5%	1/10W
R1230	1-218-893-11	METAL CHIP	82K	0.5%	1/10W
R1231	1-218-875-11	METAL CHIP	15K	0.5%	1/10W
R1232	1-218-877-11	METAL CHIP	18K	0.5%	1/10W
R1233	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R1234	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1236	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1237	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1238	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1239	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1243	1-216-805-11	METAL CHIP	47	5%	1/10W
R1246	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R1247	1-216-821-11	METAL CHIP	1K	5%	1/10W
R1254	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1703	1-216-805-11	METAL CHIP	47	5%	1/10W
R1714	1-216-817-11	METAL CHIP	470	5%	1/10W
R1716	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R1717	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R1718	1-216-815-11	METAL CHIP	330	5%	1/10W
R1719	1-216-805-11	METAL CHIP	47	5%	1/10W
R1720	1-216-845-11	METAL CHIP	100K	5%	1/10W
R1721	1-216-864-11	SHORT CHIP	0		
R1722	1-216-864-11	SHORT CHIP	0		
R1724	1-216-864-11	SHORT CHIP	0		
R1730	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R1781	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1782	1-216-833-11	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R1783	1-216-833-11	METAL CHIP	10K	5%	1/10W
R1801	1-211-990-11	METAL CHIP	75	0.5%	1/10W
R1900	1-216-857-11	METAL CHIP	1M	5%	1/10W
R1901	1-216-813-11	METAL CHIP	220	5%	1/10W
R1902	1-216-864-11	SHORT CHIP	0		
R1903	1-216-809-11	METAL CHIP	100	5%	1/10W
R1904	1-216-809-11	METAL CHIP	100	5%	1/10W
R2101	1-218-841-11	METAL CHIP	560	0.5%	1/10W
R2110	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R2114	1-216-801-11	METAL CHIP	22	5%	1/10W
R2115	1-216-864-11	SHORT CHIP	0		
R2119	1-216-864-11	SHORT CHIP	0		
R2129	1-216-845-11	METAL CHIP	100K	5%	1/10W
R2133	1-216-864-11	SHORT CHIP	0		
R2134	1-216-864-11	SHORT CHIP	0		
R2150	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R2151	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R2152	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R2155	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2156	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2157	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2158	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2159	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2160	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2176	1-216-864-11	SHORT CHIP	0		
R2177	1-216-864-11	SHORT CHIP	0		
R2178	1-216-821-11	METAL CHIP	1K	5%	1/10W
R2180	1-216-833-11	METAL CHIP	10K	5%	1/10W
R2184	1-216-809-11	METAL CHIP	100	5%	1/10W
R2185	1-216-809-11	METAL CHIP	100	5%	1/10W
R2187	1-216-805-11	METAL CHIP	47	5%	1/10W
		< COMPOSITION CIRCUIT BLOCK >			
RB201	1-233-413-11	RES, CHIP NETWORK 2.2K (3216)			
RB1103	1-234-400-21	CONDUCTOR, NETWORK (1005X4)			
RB1104	1-234-400-21	CONDUCTOR, NETWORK (1005X4)			
RB1105	1-234-944-21	RES, NETWORK 47 (1005X4)			
RB1106	1-234-944-21	RES, NETWORK 47 (1005X4)			
RB1107	1-234-400-21	CONDUCTOR, NETWORK (1005X4)			
RB1108	1-234-400-21	CONDUCTOR, NETWORK (1005X4)			
RB1109	1-234-400-21	CONDUCTOR, NETWORK (1005X4)			
RB1110	1-234-400-21	CONDUCTOR, NETWORK (1005X4)			
RB1111	1-234-400-21	CONDUCTOR, NETWORK (1005X4)			
RB1112	1-234-400-21	CONDUCTOR, NETWORK (1005X4)			
RB1113	1-234-400-21	CONDUCTOR, NETWORK (1005X4)			
RB1114	1-234-400-21	CONDUCTOR, NETWORK (1005X4)			
RB1115	1-234-400-21	CONDUCTOR, NETWORK (1005X4)			
		< VIBRATOR >			
X501	1-795-121-21	VIBRATOR, CERAMIC (5MHz)			
X1900	1-813-218-21	VIBRATOR, CRYSTAL (27MHz)			
**********					
		MOTOR BOARD			
		**********			
		< CONNECTOR >			
CN010	1-564-721-11	PIN, CONNECTOR (SMALL TYPE) 5P			
CN011	1-506-481-11	PIN, CONNECTOR 2P			

Ref. No.	Part No.	Description			Remark
		< SWITCH >			
SW010	1-572-086-11	SWITCH, LEAF (CHUCKING)			
**********					
		OUT-SW BOARD			
		**********			
		< SWITCH >			
SW011	1-762-424-11	SWITCH, MICRO (TRAY OPEN/CLOSE)			
**********					
		POWER BOARD			
		**********			
	7-685-646-71	SCREW +BVTP 3X8 TYPE2 IT-3			
		< CAPACITOR >			
C50	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C51	1-126-961-11	ELECT	2.2uF	20%	50V
⚠ C52	1-112-887-51	CERAMIC	0.01uF	20%	250V
C53	1-126-943-11	ELECT	2200uF	20%	25V
C54	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C55	1-130-479-91	MYLAR	0.0047uF	5%	50V
C56	1-136-162-00	FILM	0.056uF	5%	50V
C57	1-126-941-11	ELECT	470uF	20%	25V
C58	1-100-597-91	CERAMIC CHIP	0.1uF	10%	25V
C60	1-126-941-11	ELECT	470uF	20%	25V
C101	1-128-576-11	ELECT	100uF	20%	63V
C102	1-128-548-11	ELECT	4700uF	20%	25V
C103	1-126-946-11	ELECT	6800uF	20%	25V
C104	1-126-939-11	ELECT	10000uF	20%	16V
C110	1-126-964-11	ELECT	10uF	20%	50V
C111	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C112	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C113	1-162-974-11	CERAMIC CHIP	0.01uF		50V
C114	1-126-767-11	ELECT	1000uF	20%	16V
C115	1-126-936-11	ELECT	3300uF	20%	16V
C116	1-126-918-51	ELECT	4700uF	20%	6.3V
C121	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C125	1-126-965-91	ELECT	22uF	20%	50V
C126	1-104-662-91	ELECT	22uF	20%	25V
		< CONNECTOR >			
* CN003	1-793-660-11	PIN, CONNECTOR (PC BOARD) 3P			
CN103	1-784-922-11	PIN, CONNECTOR 5P			
CN104	1-691-770-11	PLUG (MICRO CONNECTOR) 8P			
CN105	1-691-766-11	PLUG (MICRO CONNECTOR) 4P			
CN106	1-691-770-11	PLUG (MICRO CONNECTOR) 8P			
		< DIODE >			
⚠ D52	8-719-053-18	DIODE 1SR154-400TE-25			
⚠ D53	8-719-053-18	DIODE 1SR154-400TE-25			
⚠ D54	8-719-053-18	DIODE 1SR154-400TE-25			
⚠ D55	8-719-053-18	DIODE 1SR154-400TE-25			
⚠ D56	6-502-961-01	DIODE DA2J10100L			
⚠ D57	6-502-961-01	DIODE DA2J10100L			
⚠ D58	6-502-961-01	DIODE DA2J10100L			
⚠ D102	8-719-053-18	DIODE 1SR154-400TE-25			
⚠ D104	8-719-053-18	DIODE 1SR154-400TE-25			
⚠ D105	8-719-053-18	DIODE 1SR154-400TE-25			
⚠ D106	8-719-053-18	DIODE 1SR154-400TE-25			

POWER **TRANS**

Ref. No.	Part No.	Description				Remark
⚠ D107	8-719-053-18	DIODE 1SR154-400TE-25				
⚠ D108	8-719-053-18	DIODE 1SR154-400TE-25				
⚠ D109	8-719-053-18	DIODE 1SR154-400TE-25				
⚠ D110	8-719-053-18	DIODE 1SR154-400TE-25				
⚠ D111	8-719-053-18	DIODE 1SR154-400TE-25				
⚠ D112	8-719-053-18	DIODE 1SR154-400TE-25				
⚠ D113	8-719-053-18	DIODE 1SR154-400TE-25				
⚠ D114	8-719-053-18	DIODE 1SR154-400TE-25				
⚠ D115	8-719-053-18	DIODE 1SR154-400TE-25				
⚠ D116	8-719-053-18	DIODE 1SR154-400TE-25				
⚠ D129	8-719-083-70	DIODE UDZSUSTE-1727B				
⚠ D130	6-503-015-01	DIODE DZ2J051M0L				
		< EARTH TERMINAL >				
* EE51	1-537-738-21	TERMINAL, EARTH				
* EE102	1-537-738-21	TERMINAL, EARTH				
		< FUSE HOLDER >				
FH01	1-533-233-11	FUSE HOLDER				
FH02	1-533-233-11	FUSE HOLDER				
		< IC >				
⚠ IC51	8-759-450-47	IC BA05T				
⚠ IC52	6-708-659-01	IC BA00BC0WT-V5				
⚠ IC101	8-759-473-41	IC BA10T				
⚠ IC102	8-759-473-41	IC BA10T				
⚠ IC103	6-708-659-01	IC BA00BC0WT-V5				
		< TRANSISTOR >				
⚠ Q51	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF			
⚠ Q52	8-729-620-07	TRANSISTOR	2SC3052EF-T1-LEF			
⚠ Q101	6-550-744-01	TRANSISTOR	2SA1900T100Q			
		< RESISTOR >				
R51	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R52	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W	
R53	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R54	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
R55	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R56	1-216-847-11	METAL CHIP	150K	5%	1/10W	
R57	1-216-843-11	METAL CHIP	68K	5%	1/10W	
⚠ R60	1-249-389-91	CARBON	4.7	5%	1/4W	F
R61	1-216-819-11	METAL CHIP	680	5%	1/10W	
R101	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R102	1-216-833-11	METAL CHIP	10K	5%	1/10W	
⚠ R103	1-249-423-91	CARBON	3.3K	5%	1/4W	F
R104	1-216-809-11	METAL CHIP	100	5%	1/10W	
R105	1-216-809-11	METAL CHIP	100	5%	1/10W	
R106	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R107	1-216-847-11	METAL CHIP	150K	5%	1/10W	
R108	1-216-843-11	METAL CHIP	68K	5%	1/10W	
R109	1-216-836-11	METAL CHIP	18K	5%	1/10W	
R110	1-216-833-11	METAL CHIP	10K	5%	1/10W	
		< RELAY >				
⚠ RY01	1-755-266-11	RELAY, AC POWER				
		< TRANSFORMER >				
⚠ T002	1-443-517-11	POWER TRANSFORMER				

Ref. No.	Part No.	Description	Remark
		< THERMISTOR >	
⚠ TH50	1-804-046-21	THERMISTOR, POSITIVE (RXE030)	
		**********	
		TRANS BOARD	
		**********	
		< CONNECTOR >	
* CN001	1-793-660-11	PIN, CONNECTOR (PC BOARD) 3P	
		**********	
		MISCELLANEOUS	
		**********	
6	1-828-338-11	WIRE (FLAT TYPE) (15 CORE)	
⚠ 54	1-834-966-41	POWER-SUPPLY CORD (AEP)	
⚠ 54	1-837-309-21	CORD, POWER-SUPPLY (UK)	
⚠ 152	8-820-322-04	OPTICAL PICK-UP BLOCK (KHM-313CAB/C2RP)	
155	1-838-107-51	WIRE, FLAT TYPE (24 CORE)	
⚠ F001	1-532-499-33	FUSE (T400mAL/250V)	
M001	A-4604-363-A	MOTOR (L) ASSY (LOADING)	
⚠ T001	1-445-874-11	POWER TRANSFORMER	
		**********	
		ACCESSORIES	
		**********	
	1-489-030-11	REMOTE COMMANDER (RM-ASU097)	
	1-790-735-12	CORD, CONNECTION (Audio connecting cord (Red and White plugs))	
	4-193-086-11	MANUAL, INSTRUCTION (ENGLISH) (UK)	
	4-193-086-21	MANUAL, INSTRUCTION (FRENCH, SPANISH, GERMAN, DUTCH, ITALIAN, SWEDISH, POLISH) (AEP)	
	4-193-086-31	MANUAL, INSTRUCTION (DANISH, FINNISH) (AEP)	
	4-193-086-41	MANUAL, INSTRUCTION (PORTUGUESE) (AEP)	